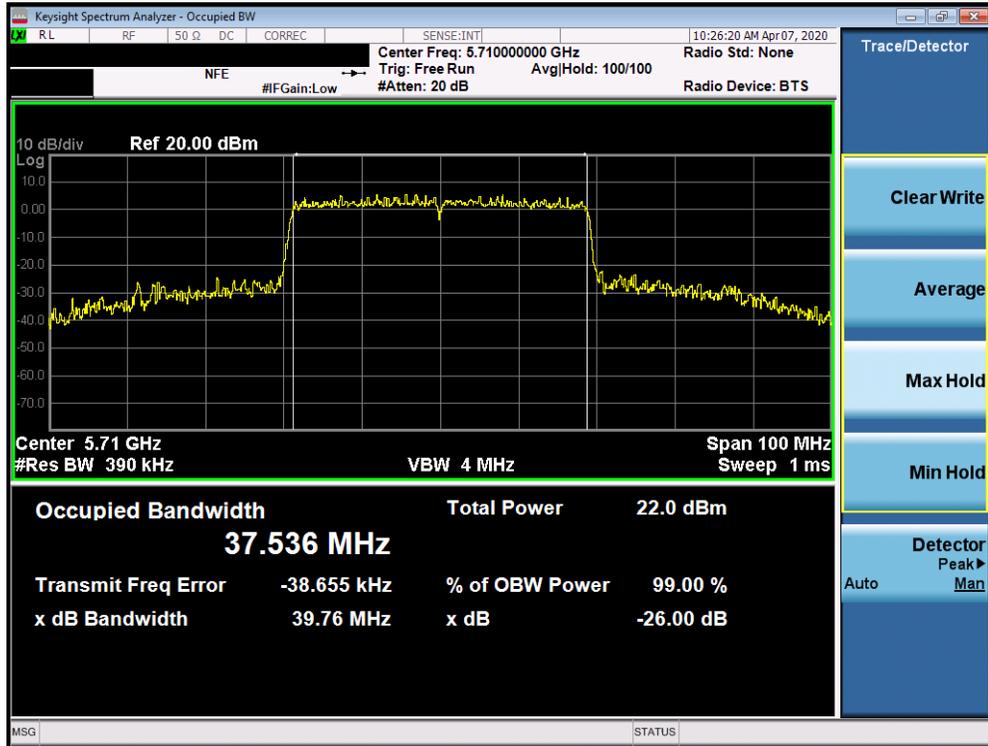
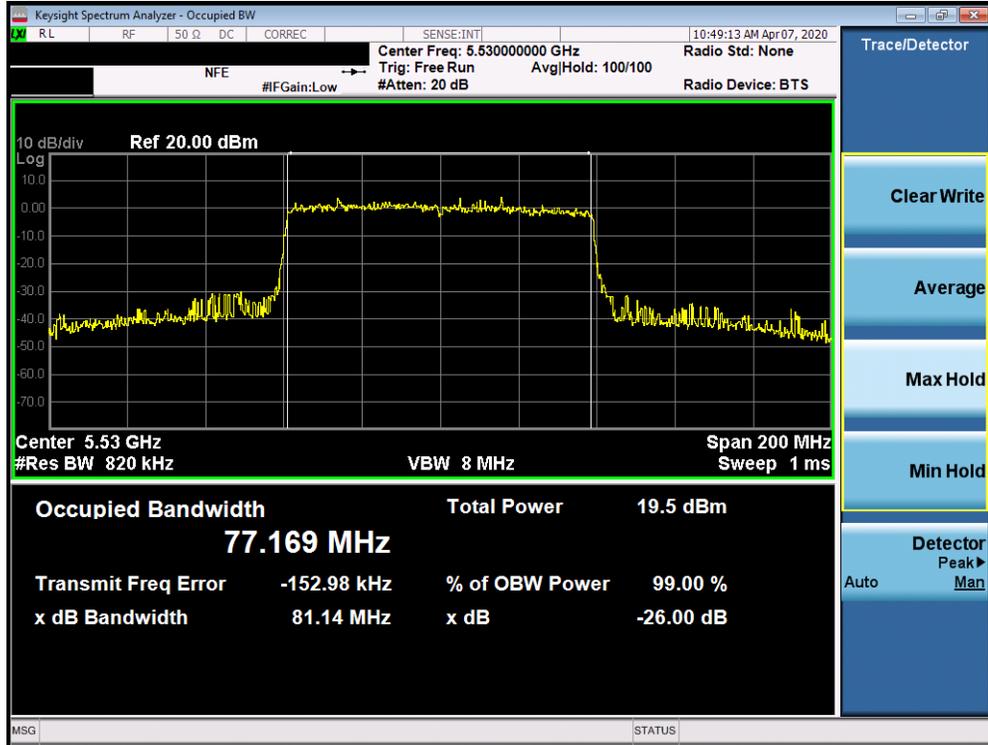


Plot 7-80. 26dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 118)

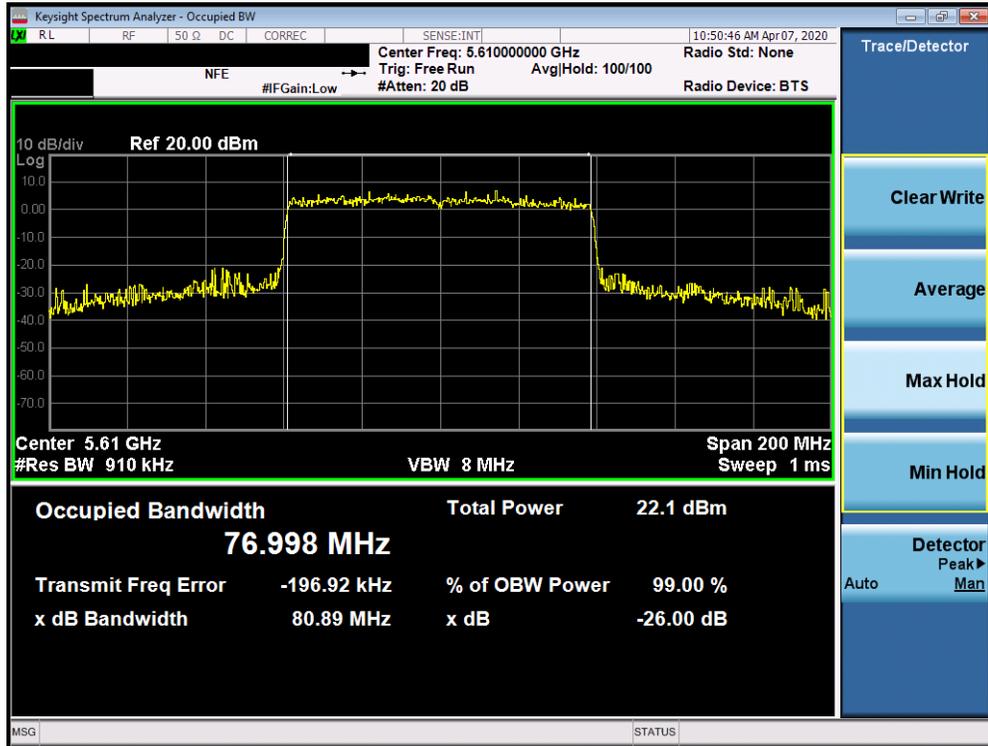


Plot 7-81. 26dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 2C) – Ch. 142)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 60 of 299 |



Plot 7-82. 26dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 2C) – Ch. 106)



Plot 7-83. 26dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 2C) – Ch. 122)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 61 of 299 |



Plot 7-84. 26dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 2C) – Ch. 138)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 62 of 299 |

7.3 6dB Bandwidth Measurement – 802.11ax OFDMA §15.407 (e); RSS-Gen [6.7]

Test Overview and Limit

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. The spectrum analyzer’s bandwidth measurement function is configured to measure the 6dB bandwidth.

In the 5.725 – 5.850GHz band, the 6dB bandwidth must be ≥ 500 kHz.

Test Procedure Used

ANSI C63.10-2013 – Section 6.9.2
KDB 789033 D02 v02r01 – Section C

Test Settings

1. The signal analyzers’ automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The “X” dB bandwidth parameter was set to $X = 6$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 100 kHz
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-2. Test Instrument & Measurement Setup

Test Notes

The 6dB Bandwidth measurement for each channel was measured with the RU index showing the highest conducted power.

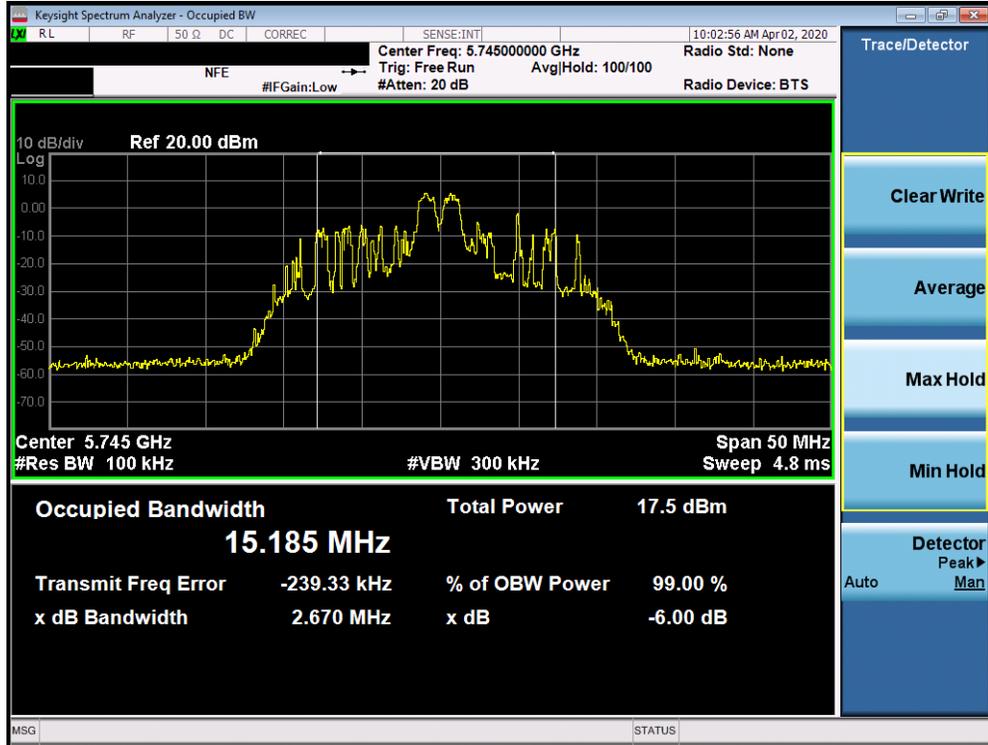
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 63 of 299 |

SISO Antenna-1 6 dB Bandwidth Measurements (26 Tones)

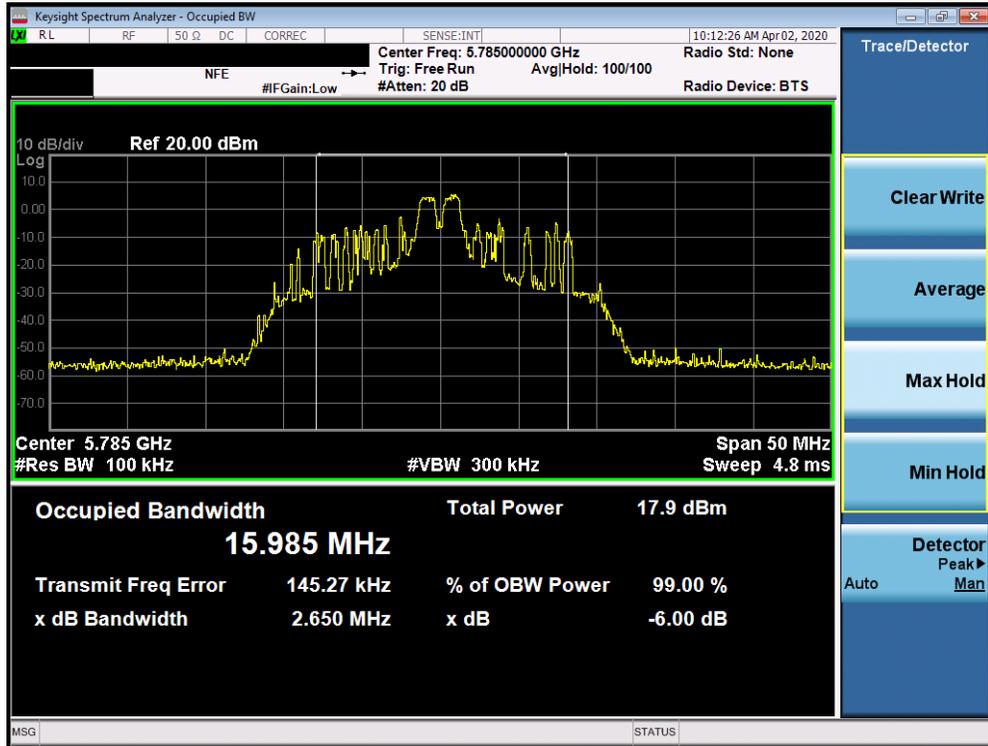
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|
| Band 3 | 5745 | 149 | ax (20MHz) | 26T | MCS0 | 2.67 |
| | 5785 | 157 | ax (20MHz) | 26T | MCS0 | 2.65 |
| | 5825 | 165 | ax (20MHz) | 26T | MCS0 | 2.65 |
| | 5755 | 151 | ax (40MHz) | 26T | MCS0 | 2.03 |
| | 5795 | 159 | ax (40MHz) | 26T | MCS0 | 2.15 |
| | 5775 | 155 | ax (80MHz) | 26T | MCS0 | 2.82 |

Table 7-6. Conducted Bandwidth Measurements SISO ANT1 (26 Tones)

| | | | | |
|--|---|---|---|--|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | Page 64 of 299 | |

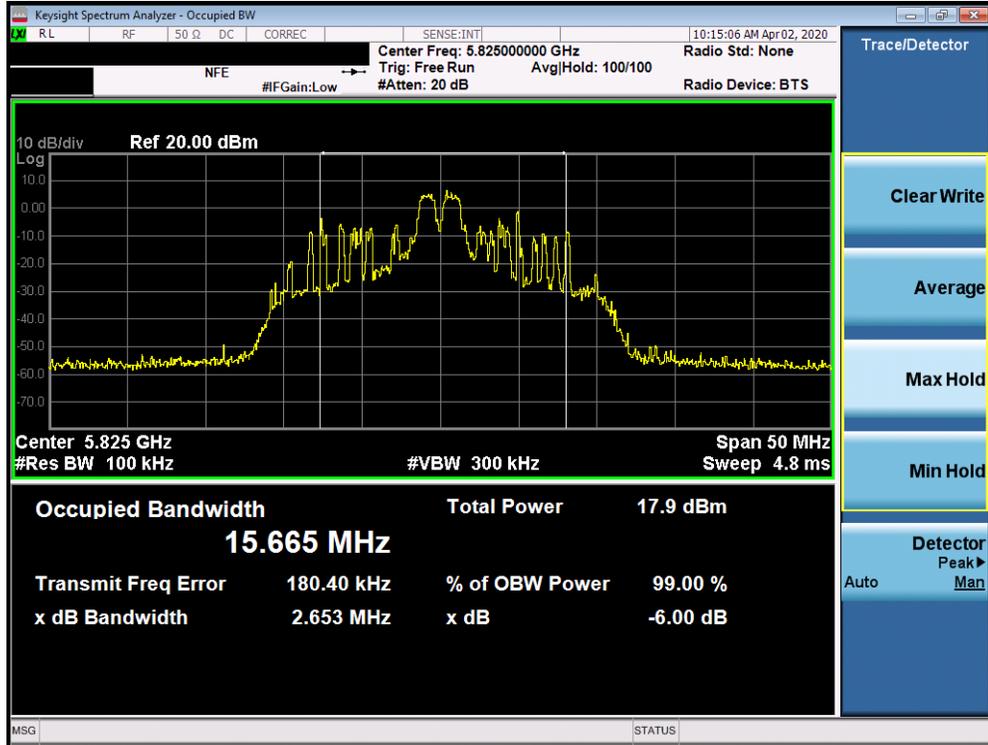


Plot 7-85. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

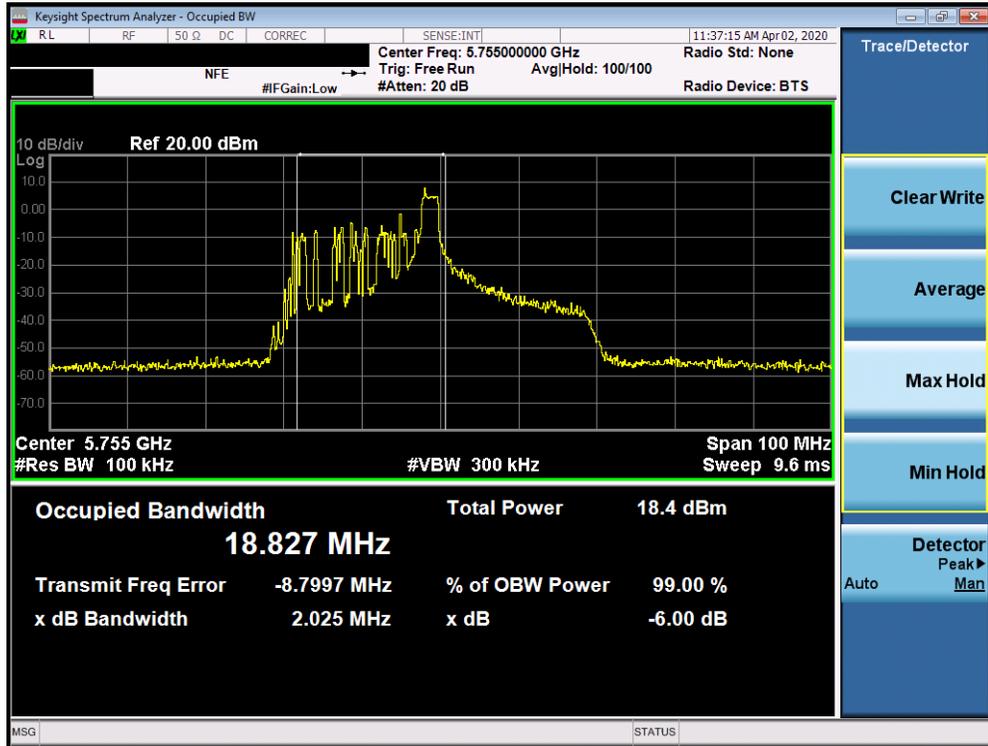


Plot 7-86. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 65 of 299 |

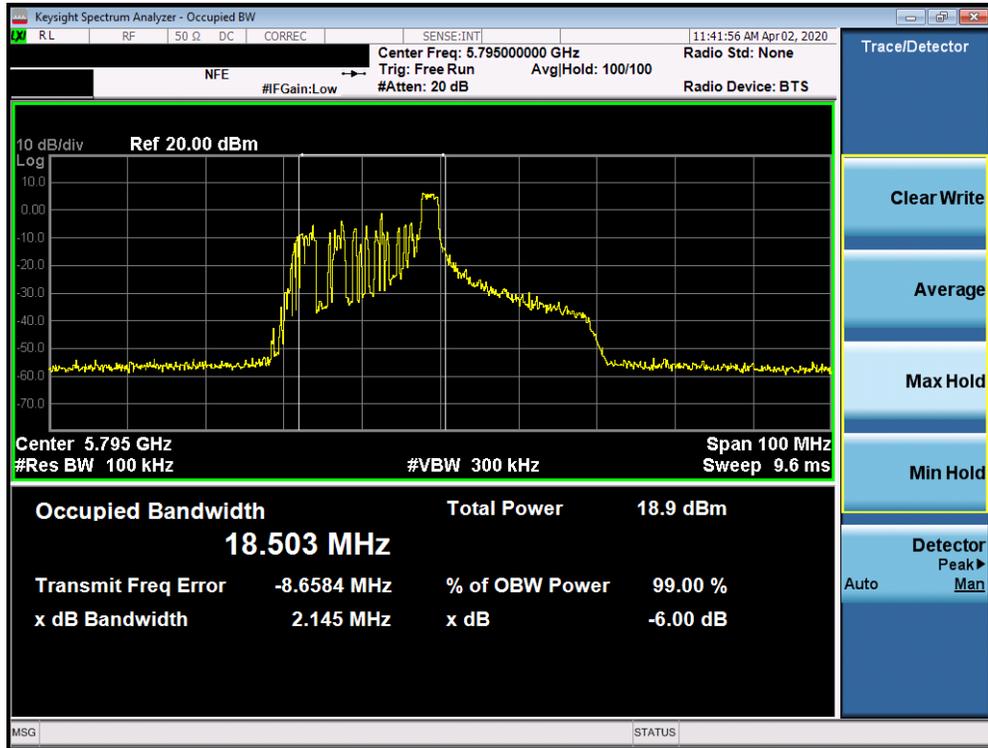


Plot 7-87. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

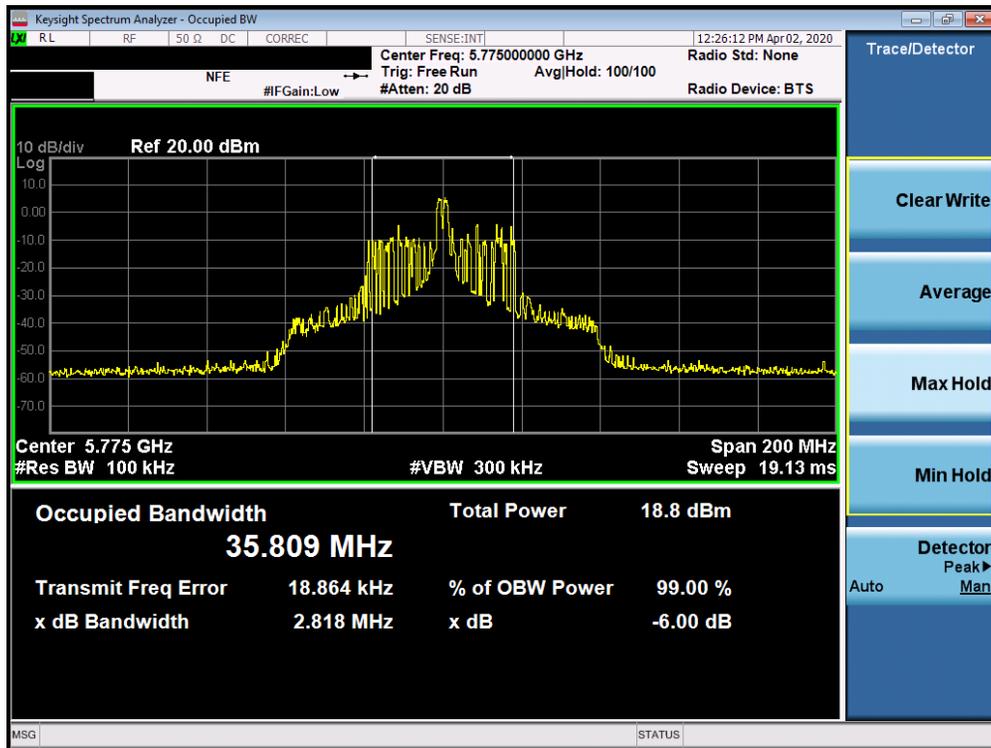


Plot 7-88. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 66 of 299 |



Plot 7-89. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



Plot 7-90. 6dB Bandwidth Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

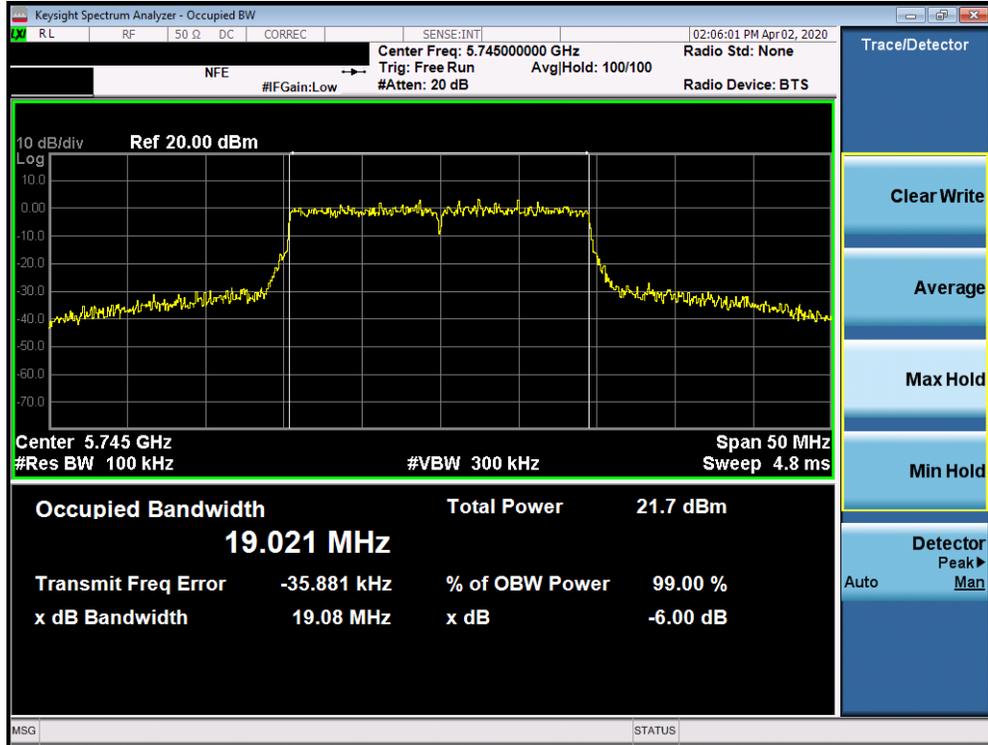
| | | | | |
|---|--|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 67 of 299 |

SISO Antenna-1 6 dB Bandwidth Measurements (Full Tones)

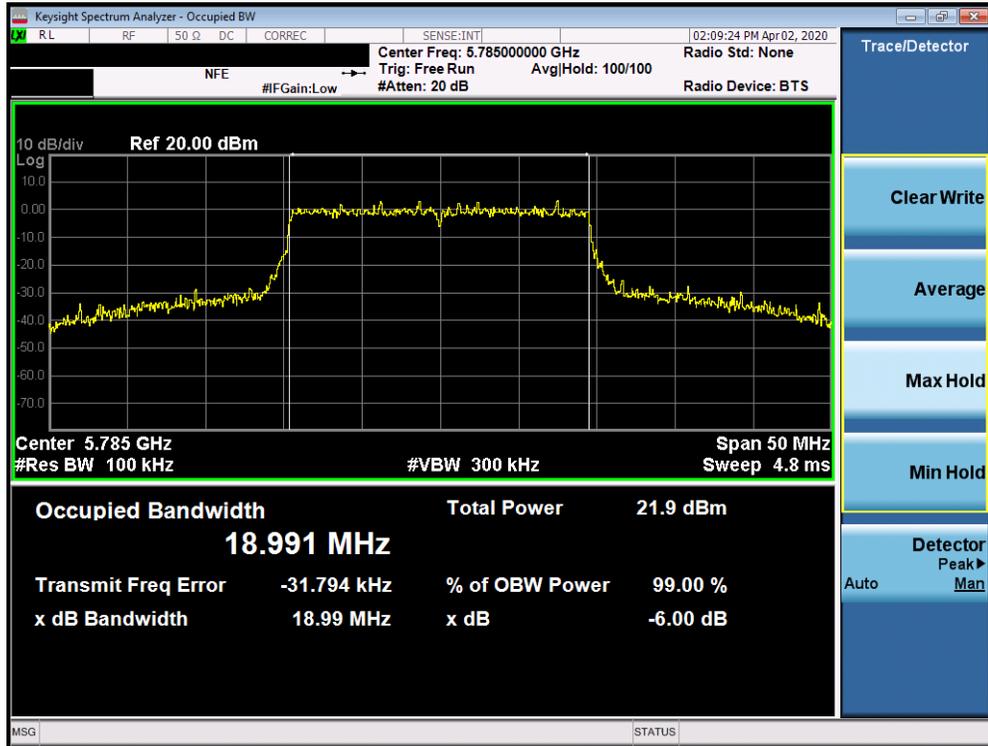
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|
| Band 3 | 5745 | 149 | ax (20MHz) | 242T | MCS0 | 19.08 |
| | 5785 | 157 | ax (20MHz) | 242T | MCS0 | 18.99 |
| | 5825 | 165 | ax (20MHz) | 242T | MCS0 | 18.89 |
| | 5755 | 151 | ax (40MHz) | 242T | MCS0 | 37.54 |
| | 5795 | 159 | ax (40MHz) | 242T | MCS0 | 36.95 |
| | 5775 | 155 | ax (80MHz) | 242T | MCS0 | |

Table 7-7. Conducted Bandwidth Measurements SISO ANT1 (Full Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 68 of 299 |

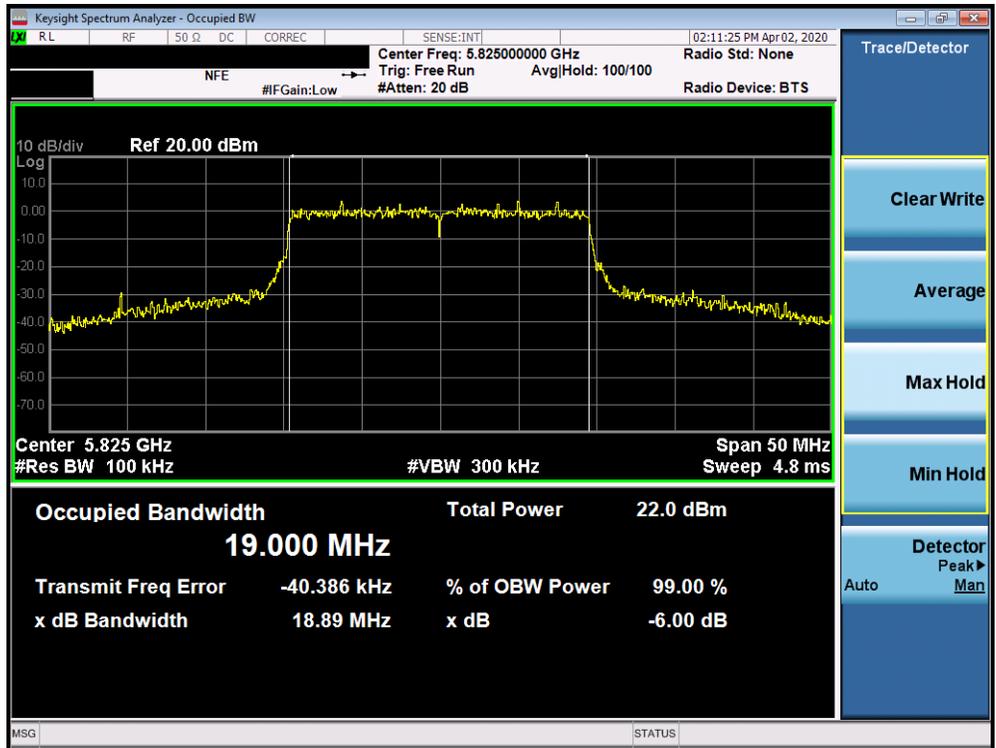


Plot 7-91. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

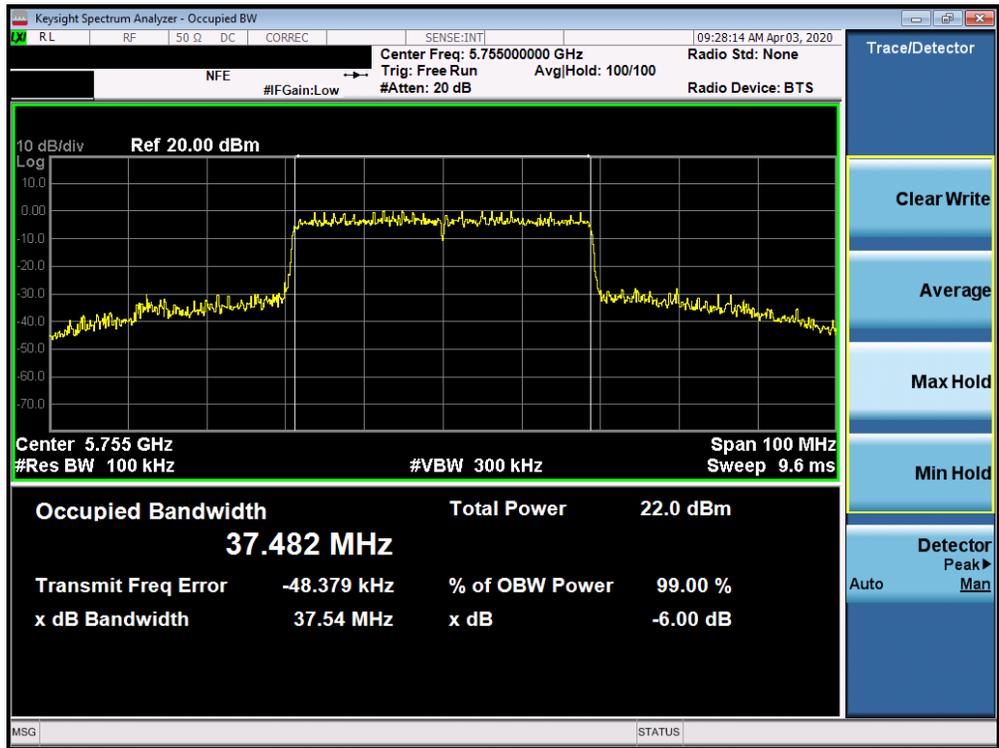


Plot 7-92. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|--|---|----------------|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 69 of 299 |

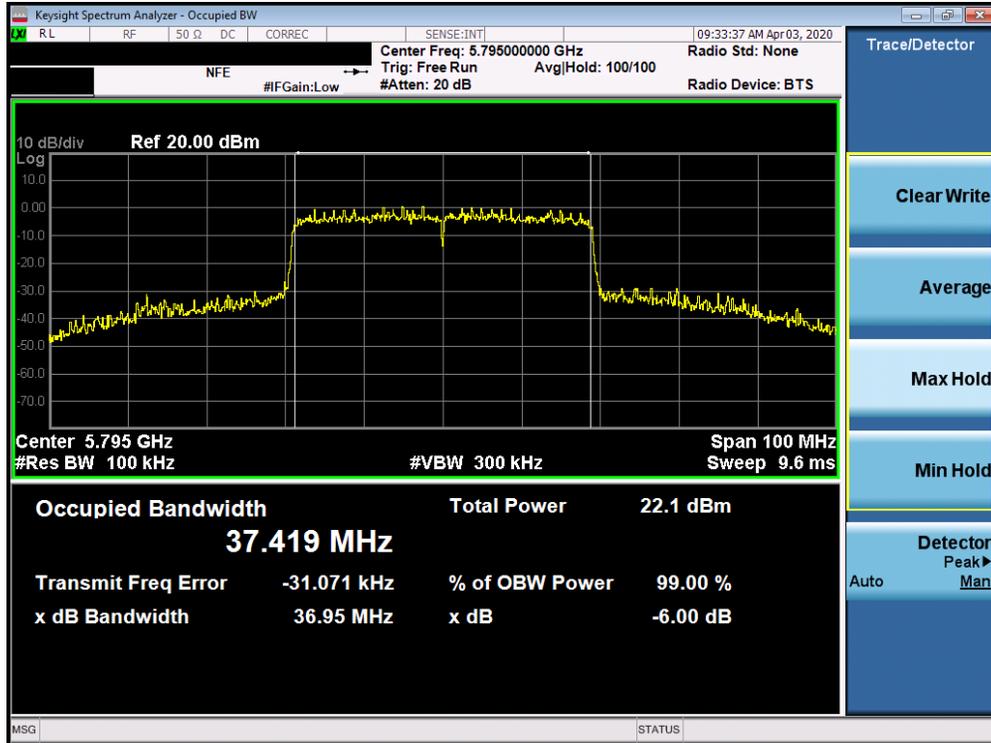


Plot 7-93. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 165)

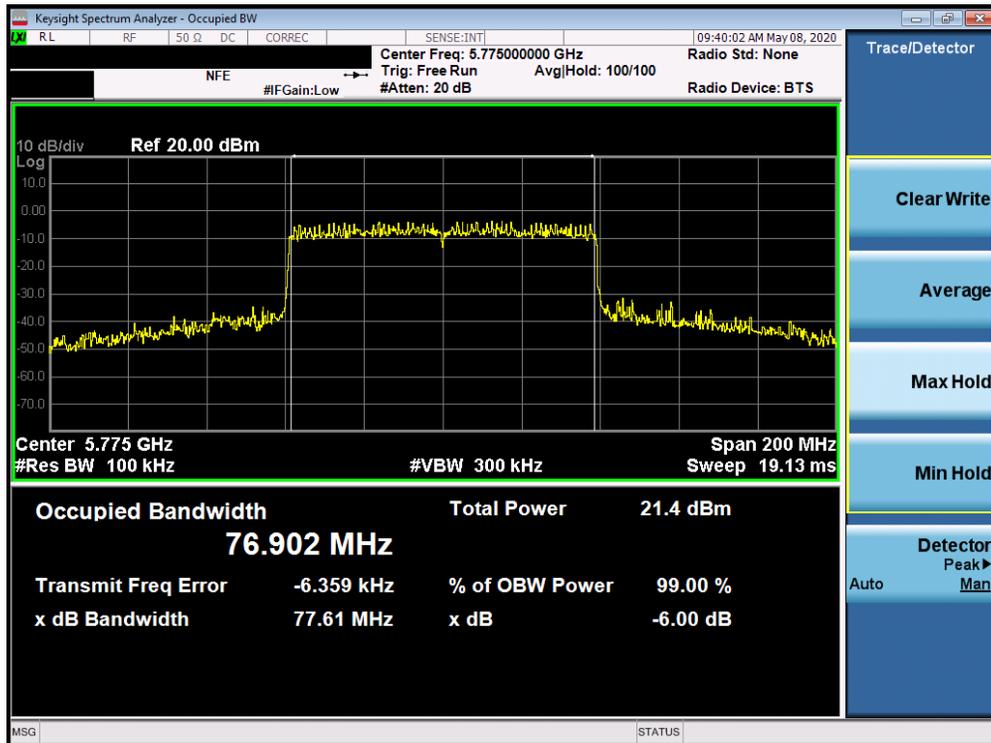


Plot 7-94. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 70 of 299 |



Plot 7-95. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 159)



Plot 7-96. 6dB Bandwidth Plot SISO ANT1 (80MHz BW 802.11ax – 996 Tones (UNII Band 3) – Ch. 155)

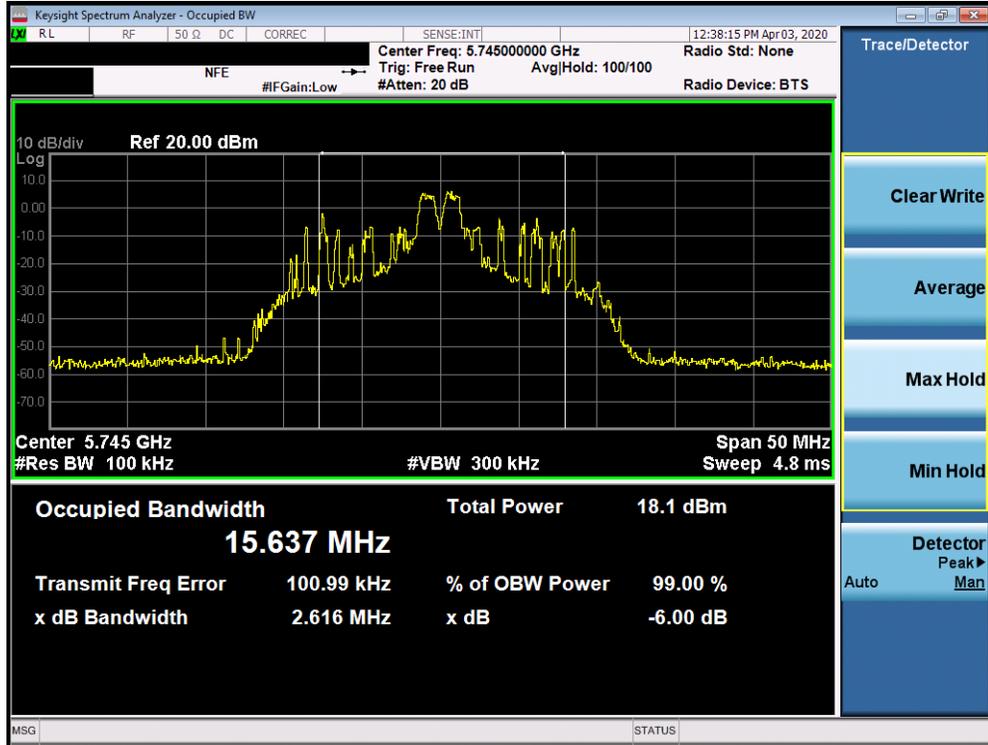
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 71 of 299 |

SISO Antenna-2 6dB Bandwidth Measurements (26 Tones)

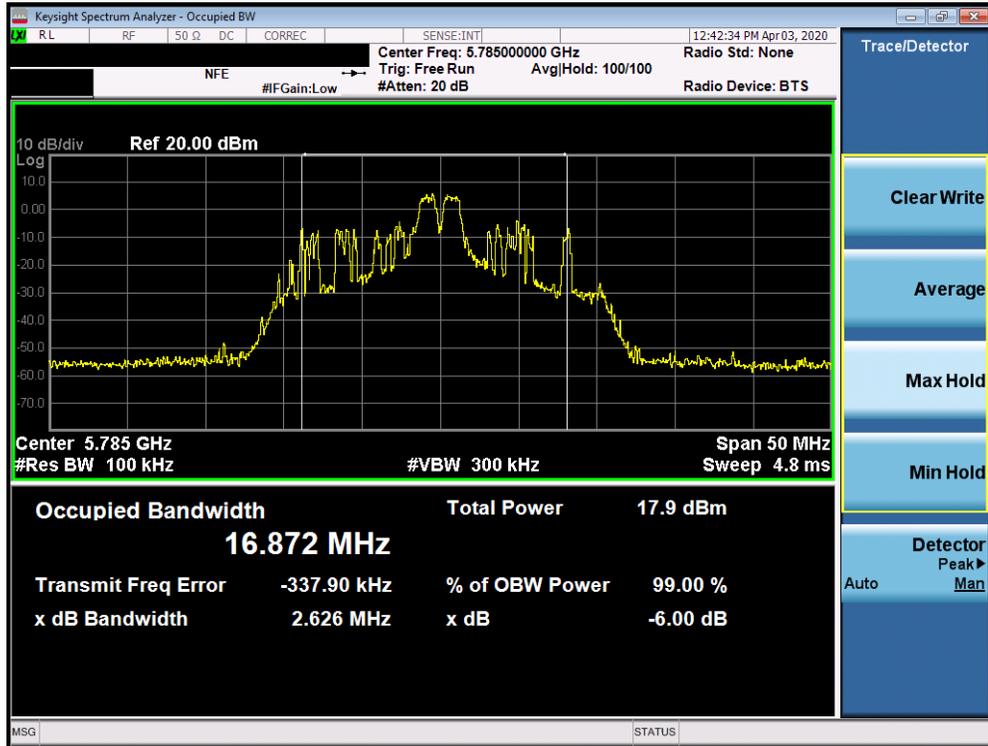
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|
| Band 3 | 5745 | 149 | ax (20MHz) | 26T | MCS0 | 2.62 |
| | 5785 | 157 | ax (20MHz) | 26T | MCS0 | 2.63 |
| | 5825 | 165 | ax (20MHz) | 26T | MCS0 | 2.72 |
| | 5755 | 151 | ax (40MHz) | 26T | MCS0 | 2.14 |
| | 5795 | 159 | ax (40MHz) | 26T | MCS0 | 2.15 |
| | 5775 | 155 | ax (80MHz) | 26T | MCS0 | 2.82 |

Table 7-8. Conducted Bandwidth Measurements SISO ANT2 (26 Tones)

| | | | | | |
|--|---|---|--|---|--|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) | |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 72 of 299 | |

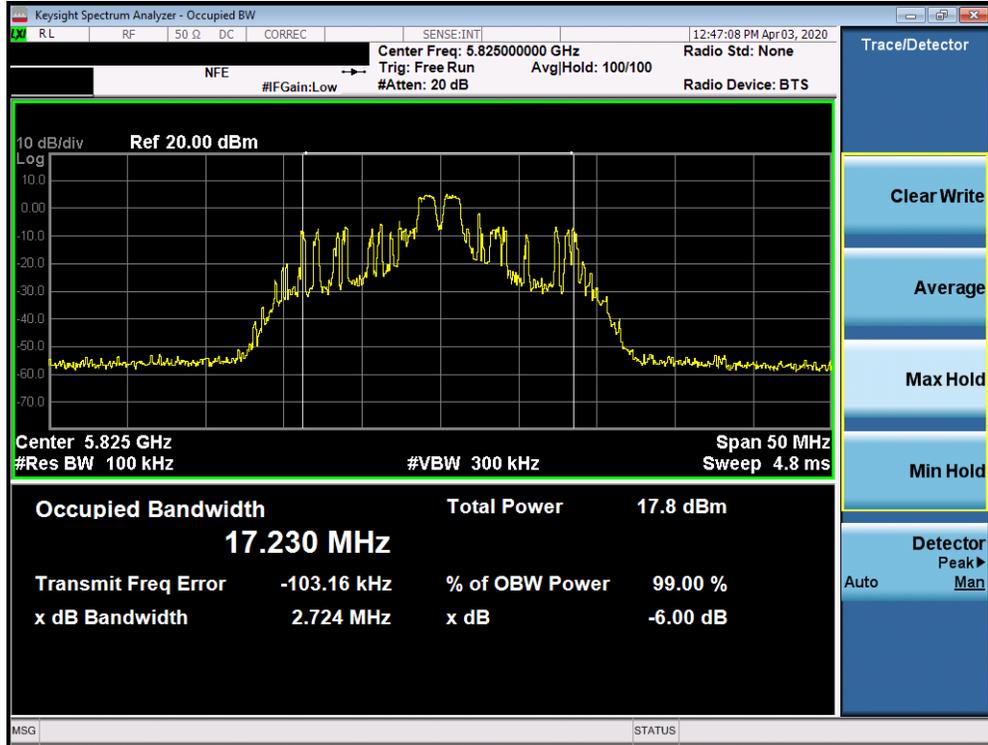


Plot 7-97. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

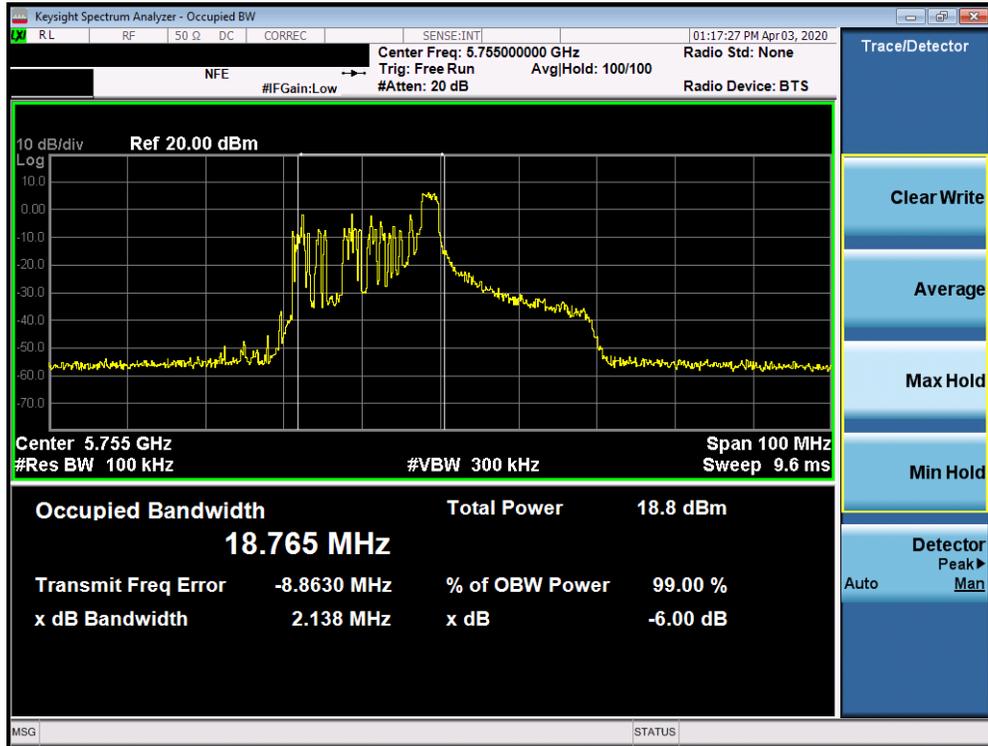


Plot 7-98. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 73 of 299 |

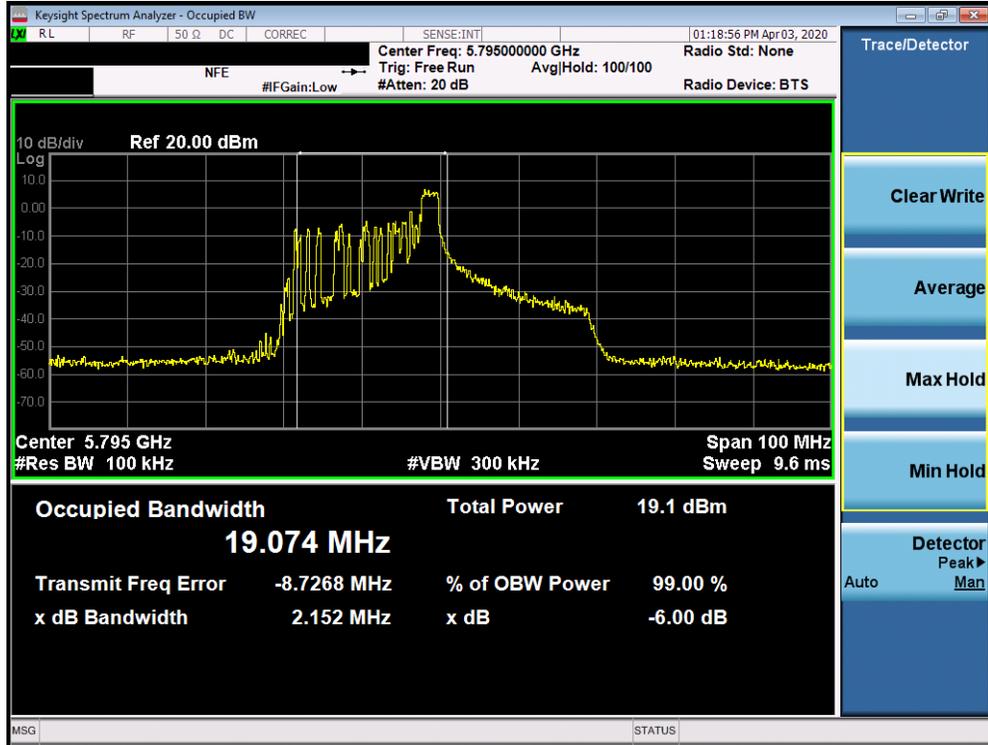


Plot 7-99. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

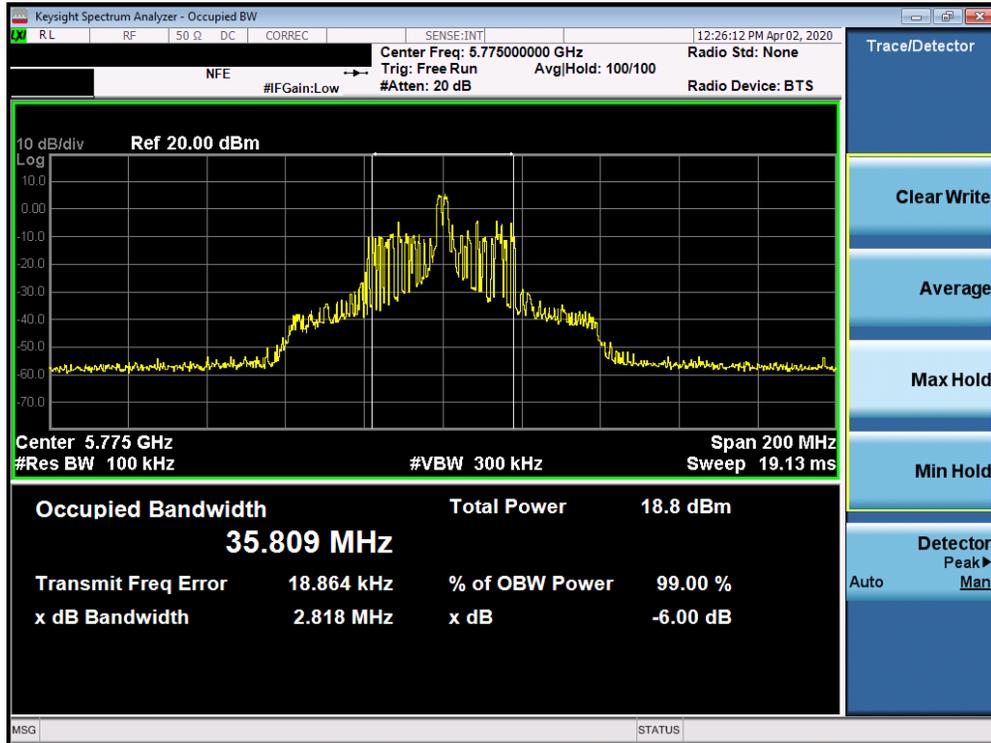


Plot 7-100. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 74 of 299 |



Plot 7-101. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)



Plot 7-102. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

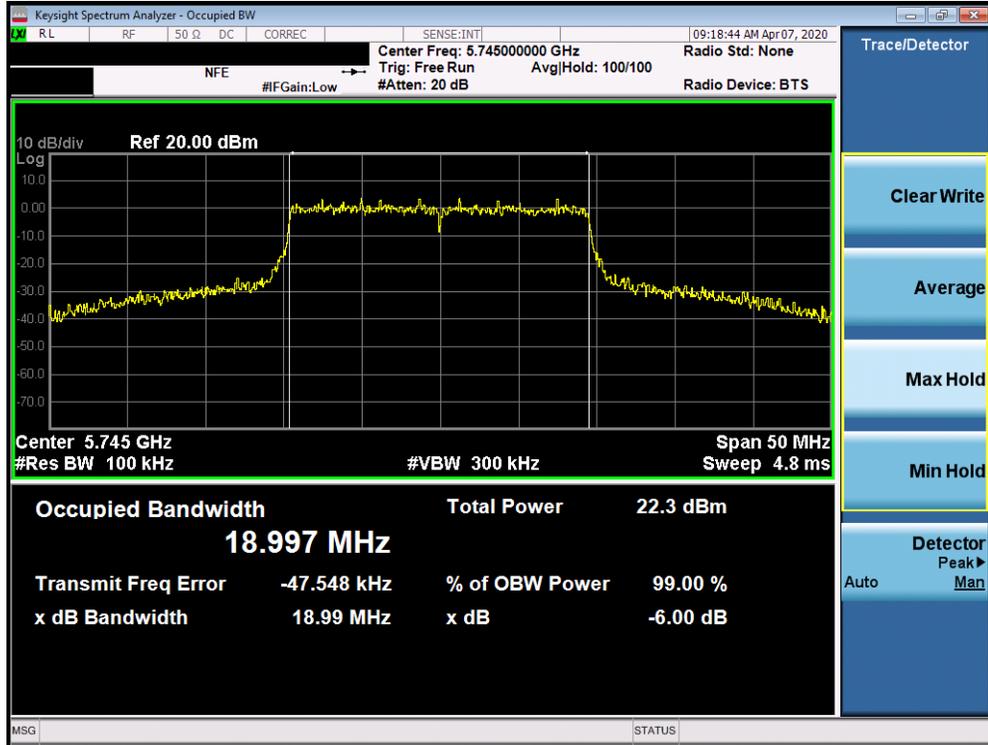
| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 75 of 299 |

SISO Antenna-2 6dB Bandwidth Measurements (Full Tones)

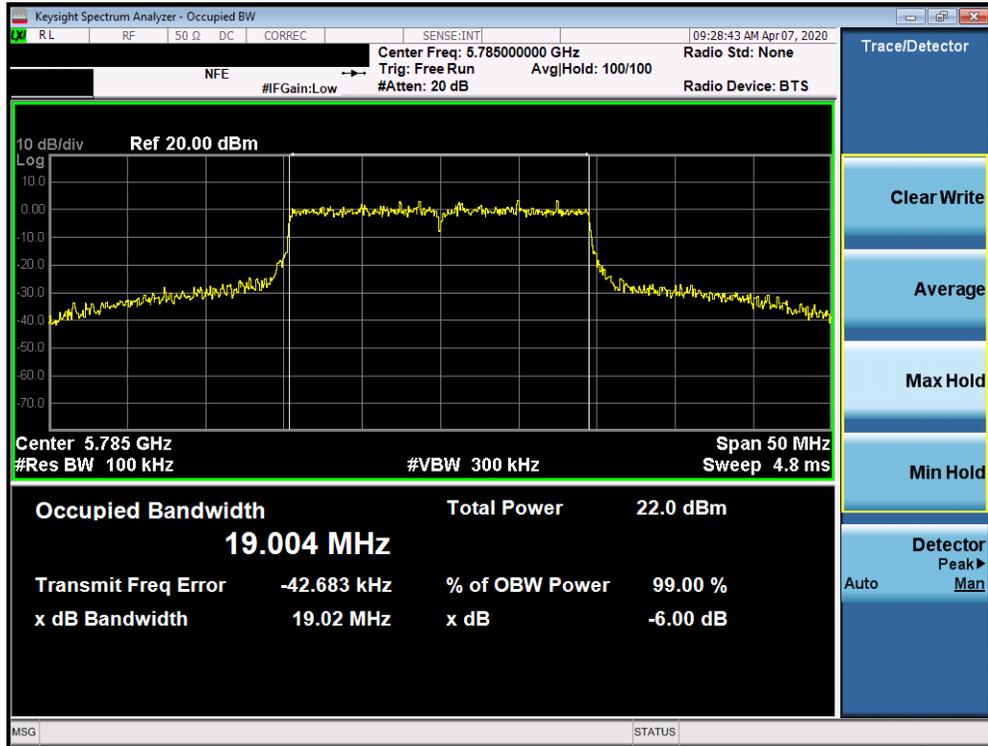
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|
| Band 3 | 5745 | 149 | ax (20MHz) | 242T | MCS0 | 18.99 |
| | 5785 | 157 | ax (20MHz) | 242T | MCS0 | 19.02 |
| | 5825 | 165 | ax (20MHz) | 242T | MCS0 | 19.00 |
| | 5755 | 151 | ax (40MHz) | 242T | MCS0 | 37.65 |
| | 5795 | 159 | ax (40MHz) | 242T | MCS0 | 37.29 |
| | 5775 | 155 | ax (80MHz) | 242T | MCS0 | 77.20 |

Table 7-9. Conducted Bandwidth Measurements SISO ANT2 (Full Tones)

| | | | | | |
|--|---|---|--|---|--|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) | |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 76 of 299 | |

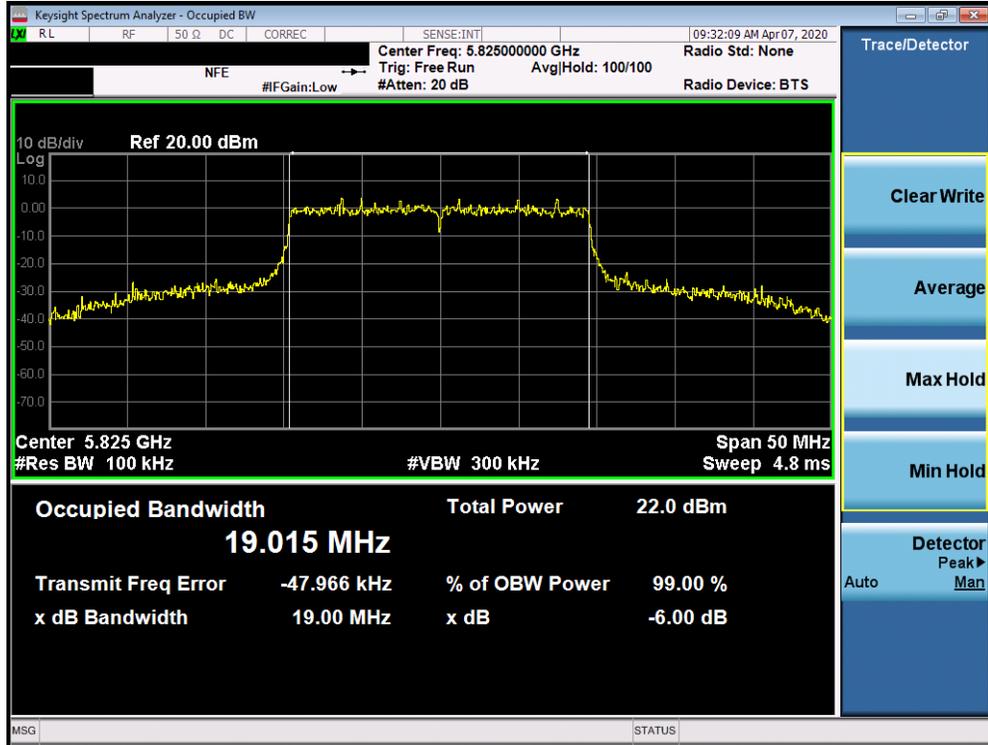


Plot 7-103. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 149)

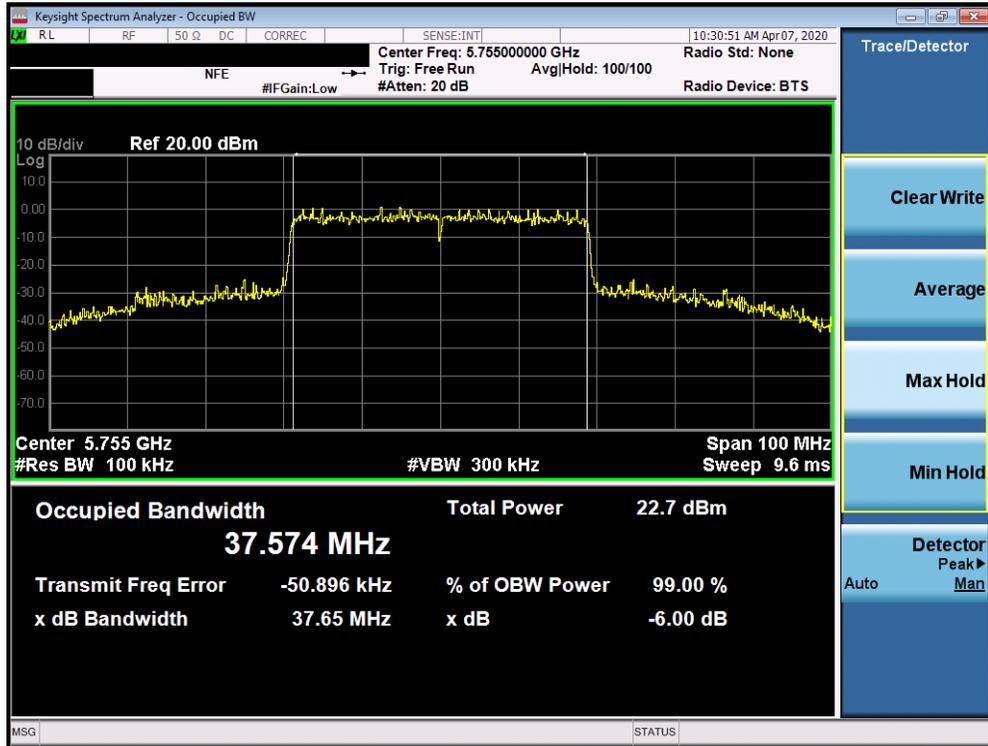


Plot 7-104. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 77 of 299 |

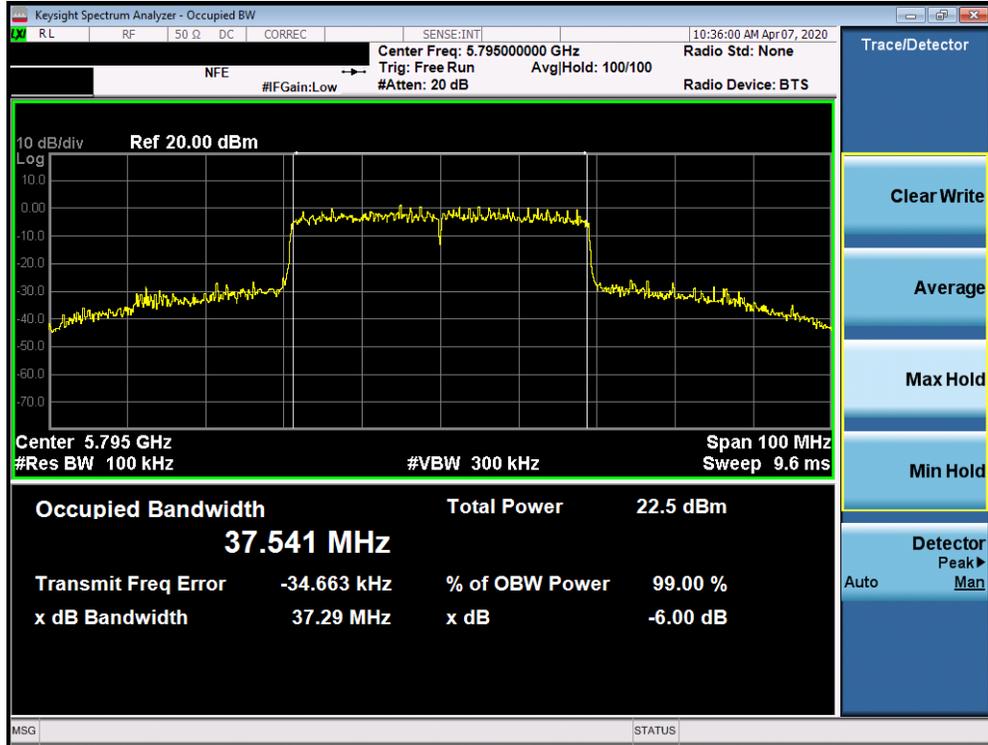


Plot 7-105. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax – 242 Tones (UNII Band 3) – Ch. 165)

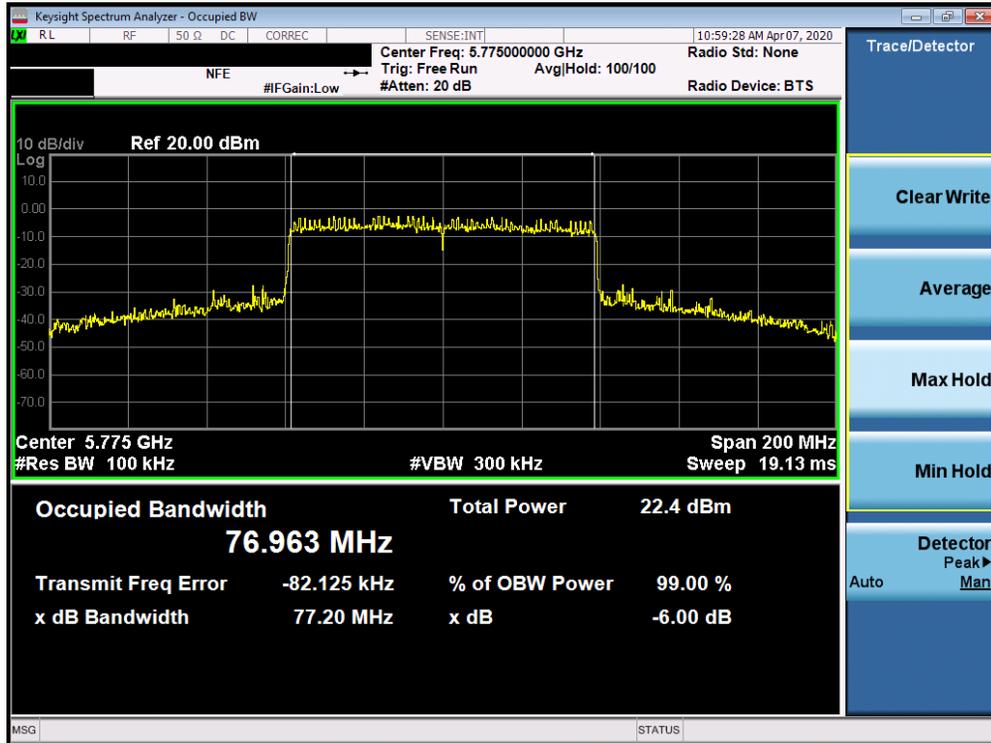


Plot 7-106. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 78 of 299 |



Plot 7-107. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax – 484 Tones (UNII Band 3) – Ch. 159)



Plot 7-108. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax – 996 Tones (UNII Band 3) – Ch. 155)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 79 of 299 |

7.4 UNII Output Power Measurement – 802.11ax OFDMA

§15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]

Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies.

In the 5.15 – 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm). The maximum e.i.r.p. shall not exceed the lesser of 200 mW or $10 + 10 \log_{10}B$, dBm.

In the 5.25 – 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or $11 \text{ dBm} + 10\log_{10}(26\text{dB BW}) = 11 \text{ dBm} + 10\log_{10}(25.72) = 25.10\text{dBm}$. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or $17 + 10 \log_{10}B$, dBm.

In the 5.47 – 5.725GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or $11 \text{ dBm} + 10\log_{10}(26\text{dB BW}) = 11 \text{ dBm} + 10\log_{10}(28.73) = 25.58\text{dBm}$. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or $17 + 10 \log_{10}B$, dBm.

In the 5.725 – 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm). The maximum e.i.r.p. is 36 dBm.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G
 KDB 789033 D02 v02r01 – Section E)3)b) Method PM-G
 ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique
 KDB 662911 v02r01 – Section E)1) Measure-and-Sum Technique

Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-3. Test Instrument & Measurement Setup

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 80 of 299 |

SISO Antenna-1 Conducted Output Power Measurements (26 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 4 | 8 | | |
| | | | | | 10.46 | 10.77 | 10.70 | | |
| 5180 | 36 | AVG | 26T | 10.46 | 10.77 | 10.70 | 23.98 | -13.21 | |
| 5200 | 40 | AVG | 26T | 10.72 | 10.96 | 10.75 | 23.98 | -13.02 | |
| 5240 | 48 | AVG | 26T | 10.73 | 10.97 | 10.83 | 23.98 | -13.01 | |
| 5260 | 52 | AVG | 26T | 10.46 | 10.69 | 10.52 | 23.47 | -12.78 | |
| 5280 | 56 | AVG | 26T | 10.60 | 10.87 | 10.60 | 23.47 | -12.60 | |
| 5320 | 64 | AVG | 26T | 10.83 | 10.94 | 10.65 | 23.47 | -12.53 | |
| 5500 | 100 | AVG | 26T | 10.28 | 10.59 | 10.25 | 22.80 | -12.21 | |
| 5600 | 120 | AVG | 26T | 10.53 | 10.67 | 10.50 | 22.80 | -12.13 | |
| 5720 | 144 | AVG | 26T | 10.76 | 10.98 | 10.74 | 22.80 | -11.82 | |
| 5745 | 149 | AVG | 26T | 10.48 | 10.68 | 10.36 | 30.00 | -19.32 | |
| 5785 | 157 | AVG | 26T | 10.48 | 10.87 | 10.51 | 30.00 | -19.13 | |
| 5825 | 165 | AVG | 26T | 10.31 | 10.71 | 10.31 | 30.00 | -19.29 | |

Table 7-10. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 8 | 17 | | |
| | | | | | 10.93 | 10.01 | 10.98 | | |
| 5190 | 38 | AVG | 26T | 10.93 | 10.01 | 10.98 | 23.98 | -13.00 | |
| 5230 | 46 | AVG | 26T | 10.97 | 10.23 | 10.13 | 23.98 | -13.01 | |
| 5270 | 54 | AVG | 26T | 10.90 | 10.85 | 10.80 | 23.47 | -12.57 | |
| 5310 | 62 | AVG | 26T | 10.82 | 10.90 | 10.79 | 23.47 | -12.57 | |
| 5510 | 102 | AVG | 26T | 10.63 | 10.75 | 10.64 | 22.80 | -12.05 | |
| 5590 | 118 | AVG | 26T | 10.57 | 10.61 | 10.55 | 22.80 | -12.19 | |
| 5710 | 142 | AVG | 26T | 10.88 | 10.99 | 10.92 | 22.80 | -11.81 | |
| 5755 | 151 | AVG | 26T | 10.99 | 10.97 | 10.98 | 30.00 | -19.01 | |
| 5795 | 159 | AVG | 26T | 10.50 | 10.99 | 10.50 | 30.00 | -19.01 | |

Table 7-11. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 18 | 36 | | |
| | | | | | 10.92 | 10.76 | 10.99 | | |
| 5210 | 42 | AVG | 26T | 10.92 | 10.76 | 10.99 | 23.98 | -12.99 | |
| 5290 | 58 | AVG | 26T | 10.80 | 10.50 | 10.80 | 23.47 | -12.67 | |
| 5530 | 106 | AVG | 26T | 10.67 | 10.43 | 10.59 | 22.80 | -12.13 | |
| 5610 | 122 | AVG | 26T | 10.65 | 10.37 | 10.50 | 22.80 | -12.15 | |
| 5690 | 138 | AVG | 26T | 10.86 | 10.60 | 10.86 | 22.80 | -11.94 | |
| 5775 | 155 | AVG | 26T | 10.89 | 10.68 | 10.99 | 30.00 | -19.01 | |

Table 7-12. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 81 of 299 |

SISO Antenna-1 Conducted Output Power Measurements (52 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 39 | 40 | | |
| | | | | | 5180 | 36 | AVG | | |
| 5200 | 40 | AVG | 52T | 12.62 | 12.73 | 12.71 | 23.98 | -11.25 | |
| 5240 | 48 | AVG | 52T | 12.68 | 12.90 | 12.74 | 23.98 | -11.08 | |
| 5260 | 52 | AVG | 52T | 12.36 | 12.63 | 12.40 | 23.47 | -10.84 | |
| 5280 | 56 | AVG | 52T | 12.47 | 12.76 | 12.68 | 23.47 | -10.71 | |
| 5320 | 64 | AVG | 52T | 12.58 | 12.74 | 12.54 | 23.47 | -10.73 | |
| 5500 | 100 | AVG | 52T | 12.15 | 12.23 | 12.08 | 22.80 | -10.57 | |
| 5600 | 120 | AVG | 52T | 12.36 | 12.43 | 12.29 | 22.80 | -10.37 | |
| 5720 | 144 | AVG | 52T | 12.63 | 12.68 | 12.53 | 22.80 | -10.12 | |
| 5745 | 149 | AVG | 52T | 12.44 | 12.41 | 12.30 | 30.00 | -17.56 | |
| 5785 | 157 | AVG | 52T | 12.49 | 12.69 | 12.52 | 30.00 | -17.31 | |
| 5825 | 165 | AVG | 52T | 12.32 | 12.54 | 12.30 | 30.00 | -17.46 | |

Table 7-13. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 40 | 44 | | |
| | | | | | 5190 | 38 | AVG | | |
| 5230 | 46 | AVG | 52T | 12.25 | 12.11 | 12.24 | 23.98 | -11.73 | |
| 5270 | 54 | AVG | 52T | 12.98 | 12.82 | 12.94 | 23.47 | -10.49 | |
| 5310 | 62 | AVG | 52T | 12.98 | 12.95 | 12.93 | 23.47 | -10.49 | |
| 5510 | 102 | AVG | 52T | 12.69 | 12.49 | 12.80 | 22.80 | -10.00 | |
| 5590 | 118 | AVG | 52T | 12.67 | 12.53 | 12.64 | 22.80 | -10.13 | |
| 5710 | 142 | AVG | 52T | 12.97 | 12.82 | 12.92 | 22.80 | -9.83 | |
| 5755 | 151 | AVG | 52T | 12.92 | 12.85 | 12.96 | 30.00 | -17.04 | |
| 5795 | 159 | AVG | 52T | 12.60 | 12.94 | 12.67 | 30.00 | -17.06 | |

Table 7-14. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 44 | 52 | | |
| | | | | | 5210 | 42 | AVG | | |
| 5290 | 58 | AVG | 52T | 12.78 | 12.35 | 12.89 | 23.47 | -10.58 | |
| 5530 | 106 | AVG | 52T | 12.70 | 12.96 | 12.67 | 22.80 | -9.84 | |
| 5610 | 122 | AVG | 52T | 12.65 | 12.95 | 12.76 | 22.80 | -9.85 | |
| 5690 | 138 | AVG | 52T | 12.90 | 12.26 | 12.87 | 22.80 | -9.90 | |
| 5775 | 155 | AVG | 52T | 12.86 | 12.46 | 12.14 | 30.00 | -17.14 | |

Table 7-15. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 82 of 299 |

SISO Antenna-1 Conducted Output Power Measurements (106 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 54 | | |
| | | | | | 5180 | 36 | | |
| 5200 | 40 | AVG | 106T | 14.57 | 14.59 | 23.98 | -9.39 | |
| 5240 | 48 | AVG | 106T | 14.61 | 14.75 | 23.98 | -9.23 | |
| 5260 | 52 | AVG | 106T | 14.44 | 14.50 | 23.47 | -8.97 | |
| 5280 | 56 | AVG | 106T | 14.50 | 14.65 | 23.47 | -8.82 | |
| 5320 | 64 | AVG | 106T | 14.65 | 14.66 | 23.47 | -8.81 | |
| 5500 | 100 | AVG | 106T | 14.92 | 14.86 | 22.80 | -7.88 | |
| 5600 | 120 | AVG | 106T | 14.26 | 14.20 | 22.80 | -8.54 | |
| 5720 | 144 | AVG | 106T | 14.36 | 14.34 | 22.80 | -8.44 | |
| 5745 | 149 | AVG | 106T | 14.47 | 14.41 | 30.00 | -15.53 | |
| 5785 | 157 | AVG | 106T | 14.51 | 14.50 | 30.00 | -15.49 | |
| 5825 | 165 | AVG | 106T | 14.36 | 14.31 | 30.00 | -15.64 | |

Table 7-16. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 54 | 56 | | |
| | | | | | 5190 | 38 | AVG | | |
| 5230 | 46 | AVG | 106T | 14.40 | 14.99 | 14.39 | 23.98 | -8.99 | |
| 5270 | 54 | AVG | 106T | 14.25 | 14.81 | 14.30 | 23.47 | -8.66 | |
| 5310 | 62 | AVG | 106T | 14.34 | 14.89 | 14.20 | 23.47 | -8.58 | |
| 5510 | 102 | AVG | 106T | 14.74 | 14.41 | 14.87 | 22.80 | -7.93 | |
| 5590 | 118 | AVG | 106T | 14.72 | 14.41 | 14.65 | 22.80 | -8.08 | |
| 5710 | 142 | AVG | 106T | 14.93 | 14.76 | 14.94 | 22.80 | -7.86 | |
| 5755 | 151 | AVG | 106T | 14.35 | 14.89 | 14.47 | 30.00 | -15.11 | |
| 5795 | 159 | AVG | 106T | 14.87 | 14.90 | 14.93 | 30.00 | -15.07 | |

Table 7-17. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 56 | 60 | | |
| | | | | | 5210 | 42 | AVG | | |
| 5290 | 58 | AVG | 106T | 14.92 | 14.47 | 14.97 | 23.47 | -8.50 | |
| 5530 | 106 | AVG | 106T | 14.69 | 14.85 | 14.62 | 22.80 | -7.95 | |
| 5610 | 122 | AVG | 106T | 14.65 | 14.94 | 14.64 | 22.80 | -7.86 | |
| 5690 | 138 | AVG | 106T | 14.85 | 14.26 | 14.91 | 22.80 | -7.89 | |
| 5775 | 155 | AVG | 106T | 14.96 | 14.53 | 14.34 | 30.00 | -15.04 | |

Table 7-18. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 83 of 299 |

SISO Antenna-1 Conducted Output Power Measurements (242 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | 61 | | |
| | 5180 | 36 | AVG | 242T | 13.64 | 23.98 | -10.34 |
| | 5200 | 40 | AVG | 242T | 15.50 | 23.98 | -8.48 |
| | 5240 | 48 | AVG | 242T | 15.60 | 23.98 | -8.38 |
| | 5260 | 52 | AVG | 242T | 15.26 | 23.47 | -8.21 |
| | 5280 | 56 | AVG | 242T | 15.34 | 23.47 | -8.13 |
| | 5320 | 64 | AVG | 242T | 14.55 | 23.47 | -8.92 |
| | 5500 | 100 | AVG | 242T | 15.77 | 22.80 | -7.03 |
| | 5600 | 120 | AVG | 242T | 15.91 | 22.80 | -6.89 |
| 5720 | 144 | AVG | 242T | 15.24 | 22.80 | -7.56 | |
| 5745 | 149 | AVG | 242T | 15.13 | 30.00 | -14.87 | |
| 5785 | 157 | AVG | 242T | 15.26 | 30.00 | -14.74 | |
| 5825 | 165 | AVG | 242T | 15.11 | 30.00 | -14.89 | |

Table 7-19. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | 61 | 62 | | |
| | 5190 | 38 | AVG | 242T | 15.55 | 15.53 | 23.98 | -8.43 |
| 5230 | 46 | AVG | 242T | 15.69 | 15.63 | 23.98 | -8.29 | |
| 5270 | 54 | AVG | 242T | 15.35 | 15.38 | 23.47 | -8.09 | |
| 5310 | 62 | AVG | 242T | 14.56 | 14.50 | 23.47 | -8.91 | |
| 5510 | 102 | AVG | 242T | 15.89 | 15.94 | 22.80 | -6.86 | |
| 5590 | 118 | AVG | 242T | 15.88 | 15.99 | 22.80 | -6.81 | |
| 5710 | 142 | AVG | 242T | 15.28 | 15.34 | 22.80 | -7.46 | |
| 5755 | 151 | AVG | 242T | 15.45 | 15.50 | 30.00 | -14.50 | |
| 5795 | 159 | AVG | 242T | 15.24 | 15.36 | 30.00 | -14.64 | |

Table 7-20. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 61 | 62 | 64 | | |
| | 5210 | 42 | AVG | 242T | 14.41 | 14.79 | 14.66 | 23.98 | -9.19 |
| 5290 | 58 | AVG | 242T | 14.40 | 14.46 | 14.34 | 23.47 | -9.01 | |
| 5530 | 106 | AVG | 242T | 14.88 | 14.18 | 14.95 | 22.80 | -7.85 | |
| 5610 | 122 | AVG | 242T | 14.92 | 14.93 | 14.98 | 22.80 | -7.82 | |
| 5690 | 138 | AVG | 242T | 14.97 | 14.40 | 14.33 | 22.80 | -7.83 | |
| 5775 | 155 | AVG | 242T | 14.45 | 14.54 | 14.56 | 30.00 | -15.44 | |

Table 7-21. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | Page 84 of 299 | |

SISO Antenna-1 Conducted Output Power Measurements (484 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | 65 | | |
| | 5190 | 38 | AVG | 484T | 11.36 | 23.98 | -12.62 |
| | 5230 | 46 | AVG | 484T | 15.43 | 23.98 | -8.55 |
| | 5270 | 54 | AVG | 484T | 15.24 | 23.47 | -8.23 |
| | 5310 | 62 | AVG | 484T | 10.36 | 23.47 | -13.11 |
| | 5510 | 102 | AVG | 484T | 13.97 | 22.80 | -8.83 |
| | 5590 | 118 | AVG | 484T | 15.67 | 22.80 | -7.13 |
| | 5710 | 142 | AVG | 484T | 15.19 | 22.80 | -7.61 |
| | 5755 | 151 | AVG | 484T | 15.29 | 30.00 | -14.71 |
| 5795 | 159 | AVG | 484T | 15.27 | 30.00 | -14.73 | |

Table 7-22. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | 65 | 66 | | |
| | 5210 | 42 | AVG | 484T | 13.34 | 13.43 | 23.98 | -10.55 |
| 5290 | 58 | AVG | 484T | 11.31 | 11.51 | 23.47 | -11.96 | |
| 5530 | 106 | AVG | 484T | 14.14 | 14.29 | 22.80 | -8.51 | |
| 5610 | 122 | AVG | 484T | 14.65 | 14.96 | 22.80 | -7.84 | |
| 5690 | 138 | AVG | 484T | 14.88 | 14.25 | 22.80 | -7.92 | |
| 5775 | 155 | AVG | 484T | 14.03 | 14.18 | 30.00 | -15.82 | |

Table 7-23. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 85 of 299 |

SISO Antenna-1 Conducted Output Power Measurements (996 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | 67 | | |
| | 5210 | 42 | AVG | 996T | 12.51 | 23.98 | -11.47 |
| | 5290 | 58 | AVG | 996T | 10.28 | 23.47 | -13.19 |
| | 5530 | 106 | AVG | 996T | 11.83 | 22.80 | -10.97 |
| | 5610 | 122 | AVG | 996T | 14.71 | 22.80 | -8.09 |
| | 5690 | 138 | AVG | 996T | 14.88 | 22.80 | -7.92 |
| | 5775 | 155 | AVG | 996T | 14.15 | 30.00 | -15.85 |

Table 7-24. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power (996 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | Page 86 of 299 | |

SISO Antenna-2 Conducted Output Power Measurements (26 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 4 | 8 | | |
| | | | | | 5180 | 36 | AVG | | |
| 5200 | 40 | AVG | 26T | 10.63 | 10.81 | 10.62 | 23.98 | -13.17 | |
| 5240 | 48 | AVG | 26T | 10.74 | 10.99 | 10.82 | 23.98 | -12.99 | |
| 5260 | 52 | AVG | 26T | 10.44 | 10.78 | 10.44 | 23.47 | -12.69 | |
| 5280 | 56 | AVG | 26T | 10.56 | 10.87 | 10.59 | 23.47 | -12.60 | |
| 5320 | 64 | AVG | 26T | 10.79 | 10.99 | 10.78 | 23.47 | -12.48 | |
| 5500 | 100 | AVG | 26T | 10.11 | 10.23 | 10.97 | 22.80 | -11.83 | |
| 5600 | 120 | AVG | 26T | 10.31 | 10.34 | 10.98 | 22.80 | -11.82 | |
| 5720 | 144 | AVG | 26T | 10.99 | 10.98 | 10.68 | 22.80 | -11.81 | |
| 5745 | 149 | AVG | 26T | 10.99 | 10.99 | 10.68 | 30.00 | -19.01 | |
| 5785 | 157 | AVG | 26T | 10.76 | 10.99 | 10.52 | 30.00 | -19.01 | |
| 5825 | 165 | AVG | 26T | 10.37 | 10.64 | 10.23 | 30.00 | -19.36 | |

Table 7-25. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 8 | 17 | | |
| | | | | | 5190 | 38 | AVG | | |
| 5230 | 46 | AVG | 26T | 10.20 | 10.15 | 10.18 | 23.98 | -13.78 | |
| 5270 | 54 | AVG | 26T | 10.96 | 10.95 | 10.86 | 23.47 | -12.51 | |
| 5310 | 62 | AVG | 26T | 10.99 | 10.98 | 10.91 | 23.47 | -12.48 | |
| 5510 | 102 | AVG | 26T | 10.67 | 10.35 | 10.52 | 22.80 | -12.13 | |
| 5590 | 118 | AVG | 26T | 10.69 | 10.25 | 10.39 | 22.80 | -12.11 | |
| 5710 | 142 | AVG | 26T | 10.52 | 10.11 | 10.10 | 22.80 | -12.28 | |
| 5755 | 151 | AVG | 26T | 10.56 | 10.31 | 10.28 | 30.00 | -19.44 | |
| 5795 | 159 | AVG | 26T | 10.69 | 10.99 | 10.45 | 30.00 | -19.01 | |

Table 7-26. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | 18 | 36 | | |
| | | | | | 5210 | 42 | AVG | | |
| 5290 | 58 | AVG | 26T | 10.86 | 10.49 | 10.89 | 23.47 | -12.58 | |
| 5530 | 106 | AVG | 26T | 10.64 | 10.01 | 10.35 | 22.80 | -12.16 | |
| 5610 | 122 | AVG | 26T | 10.52 | 10.95 | 10.08 | 22.80 | -11.85 | |
| 5690 | 138 | AVG | 26T | 10.57 | 10.79 | 10.81 | 22.80 | -11.99 | |
| 5775 | 155 | AVG | 26T | 10.37 | 10.77 | 10.73 | 30.00 | -19.23 | |

Table 7-27. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 87 of 299 |

SISO Antenna-2 Conducted Output Power Measurements (52 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 39 | 40 | | |
| | | | | | 5180 | 36 | AVG | | |
| 5200 | 40 | AVG | 52T | 12.67 | 12.88 | 12.67 | 23.98 | -11.10 | |
| 5240 | 48 | AVG | 52T | 12.90 | 12.99 | 12.92 | 23.98 | -10.99 | |
| 5260 | 52 | AVG | 52T | 12.63 | 12.76 | 12.60 | 23.47 | -10.71 | |
| 5280 | 56 | AVG | 52T | 12.75 | 12.88 | 12.70 | 23.47 | -10.59 | |
| 5320 | 64 | AVG | 52T | 12.80 | 12.99 | 12.89 | 23.47 | -10.48 | |
| 5500 | 100 | AVG | 52T | 12.16 | 12.21 | 12.04 | 22.80 | -10.59 | |
| 5600 | 120 | AVG | 52T | 12.30 | 12.18 | 12.99 | 22.80 | -9.81 | |
| 5720 | 144 | AVG | 52T | 12.99 | 12.91 | 12.62 | 22.80 | -9.81 | |
| 5745 | 149 | AVG | 52T | 12.87 | 12.87 | 12.53 | 30.00 | -17.13 | |
| 5785 | 157 | AVG | 52T | 12.64 | 12.69 | 12.38 | 30.00 | -17.31 | |
| 5825 | 165 | AVG | 52T | 12.34 | 12.39 | 12.14 | 30.00 | -17.61 | |

Table 7-28. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 40 | 44 | | |
| | | | | | 5190 | 38 | AVG | | |
| 5230 | 46 | AVG | 52T | 12.43 | 12.34 | 12.49 | 23.98 | -11.49 | |
| 5270 | 54 | AVG | 52T | 12.17 | 12.99 | 12.19 | 23.47 | -10.48 | |
| 5310 | 62 | AVG | 52T | 12.31 | 12.05 | 12.31 | 23.47 | -11.16 | |
| 5510 | 102 | AVG | 52T | 12.85 | 12.40 | 12.90 | 22.80 | -9.90 | |
| 5590 | 118 | AVG | 52T | 12.79 | 12.25 | 12.57 | 22.80 | -10.01 | |
| 5710 | 142 | AVG | 52T | 12.60 | 12.11 | 12.22 | 22.80 | -10.20 | |
| 5755 | 151 | AVG | 52T | 12.62 | 12.22 | 12.25 | 30.00 | -17.38 | |
| 5795 | 159 | AVG | 52T | 12.82 | 12.94 | 12.63 | 30.00 | -17.06 | |

Table 7-29. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | 44 | 52 | | |
| | | | | | 5210 | 42 | AVG | | |
| 5290 | 58 | AVG | 52T | 12.01 | 12.49 | 12.06 | 23.47 | -10.98 | |
| 5530 | 106 | AVG | 52T | 12.79 | 12.94 | 12.59 | 22.80 | -9.86 | |
| 5610 | 122 | AVG | 52T | 12.65 | 12.79 | 12.37 | 22.80 | -10.01 | |
| 5690 | 138 | AVG | 52T | 12.61 | 12.50 | 12.05 | 22.80 | -10.19 | |
| 5775 | 155 | AVG | 52T | 12.41 | 12.50 | 12.79 | 30.00 | -17.21 | |

Table 7-30. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 88 of 299 |

SISO Antenna-2 Conducted Output Power Measurements (106 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 54 | | |
| | | | | | 5180 | 36 | | |
| 5200 | 40 | AVG | 106T | 14.87 | 14.85 | 23.98 | -9.11 | |
| 5240 | 48 | AVG | 106T | 14.99 | 14.99 | 23.98 | -8.99 | |
| 5260 | 52 | AVG | 106T | 14.60 | 14.57 | 23.47 | -8.87 | |
| 5280 | 56 | AVG | 106T | 14.67 | 14.76 | 23.47 | -8.71 | |
| 5320 | 64 | AVG | 106T | 14.91 | 14.88 | 23.47 | -8.56 | |
| 5500 | 100 | AVG | 106T | 14.25 | 14.14 | 22.80 | -8.55 | |
| 5600 | 120 | AVG | 106T | 14.32 | 14.95 | 22.80 | -7.85 | |
| 5720 | 144 | AVG | 106T | 14.83 | 14.63 | 22.80 | -7.97 | |
| 5745 | 149 | AVG | 106T | 14.73 | 14.53 | 30.00 | -15.27 | |
| 5785 | 157 | AVG | 106T | 14.54 | 14.45 | 30.00 | -15.46 | |
| 5825 | 165 | AVG | 106T | 14.24 | 14.10 | 30.00 | -15.76 | |

Table 7-31. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 54 | 56 | | |
| | | | | | 5190 | 38 | AVG | | |
| 5230 | 46 | AVG | 106T | 14.69 | 14.18 | 14.75 | 23.98 | -9.23 | |
| 5270 | 54 | AVG | 106T | 14.36 | 14.88 | 14.33 | 23.47 | -8.59 | |
| 5310 | 62 | AVG | 106T | 14.48 | 14.97 | 14.36 | 23.47 | -8.50 | |
| 5510 | 102 | AVG | 106T | 14.99 | 14.52 | 14.94 | 22.80 | -7.81 | |
| 5590 | 118 | AVG | 106T | 14.80 | 14.33 | 14.64 | 22.80 | -8.00 | |
| 5710 | 142 | AVG | 106T | 14.62 | 14.12 | 14.39 | 22.80 | -8.18 | |
| 5755 | 151 | AVG | 106T | 14.58 | 14.99 | 14.40 | 30.00 | -15.01 | |
| 5795 | 159 | AVG | 106T | 14.11 | 14.76 | 14.79 | 30.00 | -15.21 | |

Table 7-32. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | 56 | 60 | | |
| | | | | | 5210 | 42 | AVG | | |
| 5290 | 58 | AVG | 106T | 14.06 | 14.48 | 14.19 | 23.47 | -8.99 | |
| 5530 | 106 | AVG | 106T | 14.80 | 14.99 | 14.69 | 22.80 | -7.81 | |
| 5610 | 122 | AVG | 106T | 14.65 | 14.70 | 14.36 | 22.80 | -8.10 | |
| 5690 | 138 | AVG | 106T | 14.60 | 14.46 | 14.08 | 22.80 | -8.20 | |
| 5775 | 155 | AVG | 106T | 14.40 | 14.45 | 14.01 | 30.00 | -15.55 | |

Table 7-33. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 89 of 299 |

SISO Antenna-2 Conducted Output Power Measurements (242 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | | 61 | |
| | 5180 | 36 | AVG | 242T | 13.64 | 23.98 | -10.34 |
| | 5200 | 40 | AVG | 242T | 15.68 | 23.98 | -8.30 |
| | 5240 | 48 | AVG | 242T | 15.95 | 23.98 | -8.03 |
| | 5260 | 52 | AVG | 242T | 15.76 | 23.47 | -7.71 |
| | 5280 | 56 | AVG | 242T | 15.85 | 23.47 | -7.62 |
| | 5320 | 64 | AVG | 242T | 14.87 | 23.47 | -8.60 |
| | 5500 | 100 | AVG | 242T | 15.08 | 22.80 | -7.72 |
| | 5600 | 120 | AVG | 242T | 15.07 | 22.80 | -7.73 |
| | 5720 | 144 | AVG | 242T | 15.63 | 22.80 | -7.17 |
| | 5745 | 149 | AVG | 242T | 15.54 | 30.00 | -14.46 |
| | 5785 | 157 | AVG | 242T | 15.45 | 30.00 | -14.55 |
| | 5825 | 165 | AVG | 242T | 15.12 | 30.00 | -14.88 |

Table 7-34. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | | 61 | 62 | |
| | 5190 | 38 | AVG | 242T | 15.61 | 15.63 | 23.98 | -8.35 |
| | 5230 | 46 | AVG | 242T | 15.79 | 15.90 | 23.98 | -8.08 |
| | 5270 | 54 | AVG | 242T | 15.64 | 15.71 | 23.47 | -7.76 |
| | 5310 | 62 | AVG | 242T | 14.74 | 14.74 | 23.47 | -8.73 |
| | 5510 | 102 | AVG | 242T | 15.15 | 15.24 | 22.80 | -7.56 |
| | 5590 | 118 | AVG | 242T | 15.97 | 15.98 | 22.80 | -6.82 |
| | 5710 | 142 | AVG | 242T | 15.75 | 15.70 | 22.80 | -7.05 |
| | 5755 | 151 | AVG | 242T | 15.67 | 15.72 | 30.00 | -14.28 |
| | 5795 | 159 | AVG | 242T | 15.32 | 15.31 | 30.00 | -14.68 |

Table 7-35. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | | 61 | 62 | 64 | |
| | 5210 | 42 | AVG | 242T | 14.65 | 14.83 | 14.80 | 23.98 | -9.15 |
| | 5290 | 58 | AVG | 242T | 14.40 | 14.73 | 14.54 | 23.47 | -8.74 |
| | 5530 | 106 | AVG | 242T | 14.96 | 14.22 | 14.17 | 22.80 | -7.84 |
| | 5610 | 122 | AVG | 242T | 14.85 | 14.84 | 14.78 | 22.80 | -7.95 |
| | 5690 | 138 | AVG | 242T | 14.75 | 14.79 | 14.50 | 22.80 | -8.01 |
| | 5775 | 155 | AVG | 242T | 14.52 | 14.61 | 14.34 | 30.00 | -15.39 |

Table 7-36. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 90 of 299 |

SISO Antenna-2 Conducted Output Power Measurements (484 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | | 65 | |
| | 5190 | 38 | AVG | 484T | 11.54 | 23.98 | -12.44 |
| | 5230 | 46 | AVG | 484T | 15.90 | 23.98 | -8.08 |
| | 5270 | 54 | AVG | 484T | 15.56 | 23.47 | -7.91 |
| | 5310 | 62 | AVG | 484T | 9.51 | 23.47 | -13.96 |
| | 5510 | 102 | AVG | 484T | 13.05 | 22.80 | -9.75 |
| | 5590 | 118 | AVG | 484T | 15.78 | 22.80 | -7.02 |
| | 5710 | 142 | AVG | 484T | 15.50 | 22.80 | -7.30 |
| | 5755 | 151 | AVG | 484T | 15.59 | 30.00 | -14.41 |
| 5795 | 159 | AVG | 484T | 15.30 | 30.00 | -14.70 | |

Table 7-37. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-----------------------------|-----------------------------|
| | | | | | 65 | 66 | | |
| | 5210 | 42 | AVG | 484T | 13.47 | 12.75 | 23.98 | -10.51 |
| 5290 | 58 | AVG | 484T | 11.27 | 11.47 | 23.47 | -12.00 | |
| 5530 | 106 | AVG | 484T | 13.94 | 13.94 | 22.80 | -8.86 | |
| 5610 | 122 | AVG | 484T | 14.67 | 14.70 | 22.80 | -8.10 | |
| 5690 | 138 | AVG | 484T | 14.50 | 14.48 | 22.80 | -8.30 | |
| 5775 | 155 | AVG | 484T | 14.40 | 14.33 | 30.00 | -15.60 | |

Table 7-38. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 91 of 299 |

SISO Antenna-2 Conducted Output Power Measurements (996 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-----------------------------|-----------------------------|
| | | | | | | 67 | |
| | 5210 | 42 | AVG | 996T | 12.40 | 23.98 | -11.58 |
| | 5290 | 58 | AVG | 996T | 10.98 | 23.47 | -12.49 |
| | 5530 | 106 | AVG | 996T | 12.38 | 22.80 | -10.42 |
| | 5610 | 122 | AVG | 996T | 14.99 | 22.80 | -7.81 |
| | 5690 | 138 | AVG | 996T | 14.93 | 22.80 | -7.87 |
| | 5775 | 155 | AVG | 996T | 14.77 | 30.00 | -15.23 |

Table 7-39. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power (996 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 92 of 299 |

MIMO Maximum Conducted Output Power Measurements (26 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|------|-------|------|------|-------|------|------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | | | 4 | | | 8 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5180 | 36 | AVG | 26T | | 7.46 | 7.58 | 10.53 | 7.68 | 7.88 | 10.79 | 7.75 | 7.46 | 10.62 | 23.98 | -13.19 |
| 5200 | 40 | AVG | 26T | | 7.68 | 7.51 | 10.61 | 8.03 | 7.90 | 10.98 | 7.72 | 7.56 | 10.65 | 23.98 | -13.00 |
| 5240 | 48 | AVG | 26T | | 7.74 | 7.83 | 10.80 | 7.00 | 7.11 | 10.07 | 7.97 | 7.69 | 10.84 | 23.98 | -13.14 |
| 5260 | 52 | AVG | 26T | | 7.50 | 7.35 | 10.44 | 7.69 | 7.67 | 10.69 | 7.51 | 7.40 | 10.47 | 23.47 | -12.78 |
| 5280 | 56 | AVG | 26T | | 7.62 | 7.45 | 10.55 | 7.83 | 7.89 | 10.87 | 7.74 | 7.58 | 10.67 | 23.47 | -12.60 |
| 5320 | 64 | AVG | 26T | | 7.75 | 7.47 | 10.62 | 7.99 | 7.88 | 10.95 | 7.80 | 7.52 | 10.67 | 23.47 | -12.52 |
| 5500 | 100 | AVG | 26T | | 7.40 | 7.15 | 10.29 | 7.65 | 7.29 | 10.48 | 7.34 | 7.01 | 10.19 | 22.80 | -12.32 |
| 5600 | 120 | AVG | 26T | | 7.47 | 6.95 | 10.23 | 7.71 | 7.07 | 10.41 | 7.46 | 6.81 | 10.16 | 22.80 | -12.39 |
| 5720 | 144 | AVG | 26T | | 7.70 | 7.70 | 10.29 | 7.99 | 6.93 | 10.50 | 7.64 | 6.48 | 10.11 | 22.80 | -12.30 |
| 5745 | 149 | AVG | 26T | | 6.55 | 7.47 | 10.04 | 6.82 | 7.43 | 10.15 | 7.49 | 8.06 | 10.79 | 30.00 | -19.21 |
| 5785 | 157 | AVG | 26T | | 7.78 | 8.14 | 10.97 | 6.96 | 7.29 | 10.14 | 7.73 | 7.85 | 10.80 | 30.00 | -19.03 |
| 5825 | 165 | AVG | 26T | | 7.64 | 7.70 | 10.68 | 7.96 | 7.99 | 10.99 | 7.52 | 7.59 | 10.57 | 30.00 | -19.01 |

Table 7-40. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|------|-------|------|------|-------|------|------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | | | 8 | | | 17 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5190 | 38 | AVG | 26T | | 7.86 | 7.85 | 10.87 | 8.11 | 7.83 | 10.98 | 7.95 | 7.95 | 10.96 | 23.98 | -13.00 |
| 5230 | 46 | AVG | 26T | | 8.03 | 7.90 | 10.98 | 7.15 | 6.91 | 10.04 | 7.22 | 7.17 | 10.21 | 23.98 | -13.00 |
| 5270 | 54 | AVG | 26T | | 7.98 | 7.63 | 10.82 | 7.99 | 7.62 | 10.82 | 7.95 | 7.75 | 10.86 | 23.47 | -12.61 |
| 5310 | 62 | AVG | 26T | | 8.06 | 7.89 | 10.99 | 8.00 | 7.95 | 10.99 | 7.99 | 7.84 | 10.93 | 23.47 | -12.48 |
| 5510 | 102 | AVG | 26T | | 7.79 | 7.72 | 10.77 | 7.65 | 7.41 | 10.54 | 7.92 | 7.54 | 10.74 | 22.80 | -12.03 |
| 5590 | 118 | AVG | 26T | | 7.80 | 7.50 | 10.66 | 7.60 | 7.21 | 10.42 | 7.74 | 7.41 | 10.59 | 22.80 | -12.14 |
| 5710 | 142 | AVG | 26T | | 8.13 | 7.41 | 10.80 | 8.10 | 6.91 | 10.56 | 8.25 | 7.14 | 10.74 | 22.80 | -12.00 |
| 5755 | 151 | AVG | 26T | | 7.13 | 7.75 | 10.46 | 7.08 | 7.48 | 10.29 | 7.23 | 7.47 | 10.36 | 30.00 | -19.54 |
| 5795 | 159 | AVG | 26T | | 6.75 | 7.27 | 10.03 | 7.20 | 7.39 | 10.31 | 7.73 | 7.95 | 10.85 | 30.00 | -19.15 |

Table 7-41. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|------|-------|------|------|-------|------|------|-------|-----------------------------|-----------------------------|
| | | | | | 0 | | | 18 | | | 36 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5210 | 42 | AVG | 26T | | 8.06 | 7.87 | 10.98 | 7.58 | 7.76 | 10.68 | 7.22 | 7.06 | 10.15 | 23.98 | -13.00 |
| 5290 | 58 | AVG | 26T | | 7.92 | 7.67 | 10.81 | 7.48 | 7.36 | 10.44 | 7.95 | 7.72 | 10.85 | 23.47 | -12.62 |
| 5530 | 106 | AVG | 26T | | 7.95 | 7.64 | 10.81 | 7.32 | 6.96 | 10.15 | 7.74 | 7.47 | 10.62 | 22.80 | -11.99 |
| 5610 | 122 | AVG | 26T | | 7.47 | 7.73 | 10.61 | 8.14 | 7.79 | 10.98 | 7.66 | 7.26 | 10.47 | 22.80 | -11.82 |
| 5690 | 138 | AVG | 26T | | 7.95 | 7.25 | 10.62 | 7.46 | 8.40 | 10.97 | 8.01 | 6.84 | 10.47 | 22.80 | -11.83 |
| 5775 | 155 | AVG | 26T | | 7.02 | 7.60 | 10.33 | 7.65 | 7.84 | 10.76 | 7.21 | 7.13 | 10.18 | 30.00 | -19.24 |

Table 7-42. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 93 of 299 |

MIMO Conducted Output Power Measurements (52 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|------|------|-------|------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | | | 39 | | | 40 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5180 | 36 | AVG | 52T | | 9.63 | 9.51 | 12.58 | 9.95 | 9.72 | 12.85 | 9.75 | 9.50 | 12.64 | 23.98 | -11.13 |
| 5200 | 40 | AVG | 52T | | 9.65 | 9.56 | 12.62 | 9.92 | 9.73 | 12.84 | 9.77 | 9.65 | 12.72 | 23.98 | -11.14 |
| 5240 | 48 | AVG | 52T | | 9.87 | 9.77 | 12.83 | 9.98 | 9.91 | 12.96 | 9.99 | 9.78 | 12.90 | 23.98 | -11.02 |
| 5260 | 52 | AVG | 52T | | 9.66 | 9.48 | 12.58 | 9.87 | 9.67 | 12.78 | 9.64 | 9.42 | 12.54 | 23.47 | -10.69 |
| 5280 | 56 | AVG | 52T | | 9.67 | 9.51 | 12.60 | 9.93 | 9.75 | 12.85 | 9.72 | 9.57 | 12.66 | 23.47 | -10.62 |
| 5320 | 64 | AVG | 52T | | 9.89 | 9.71 | 12.81 | 9.99 | 9.76 | 12.89 | 9.79 | 9.64 | 12.73 | 23.47 | -10.58 |
| 5500 | 100 | AVG | 52T | | 9.46 | 9.21 | 12.35 | 9.59 | 9.33 | 12.47 | 9.41 | 9.10 | 12.27 | 22.80 | -10.33 |
| 5600 | 120 | AVG | 52T | | 9.53 | 9.20 | 12.38 | 9.64 | 9.22 | 12.45 | 9.47 | 8.95 | 12.23 | 22.80 | -10.35 |
| 5720 | 144 | AVG | 52T | | 9.74 | 8.99 | 12.39 | 9.98 | 8.93 | 12.50 | 8.76 | 9.77 | 12.30 | 22.80 | -10.30 |
| 5745 | 149 | AVG | 52T | | 9.58 | 8.60 | 12.13 | 8.80 | 9.37 | 12.10 | 9.56 | 10.06 | 12.83 | 30.00 | -17.17 |
| 5785 | 157 | AVG | 52T | | 9.74 | 10.02 | 12.89 | 8.94 | 9.26 | 12.11 | 9.74 | 9.82 | 12.79 | 30.00 | -17.11 |
| 5825 | 165 | AVG | 52T | | 9.62 | 9.74 | 12.69 | 9.87 | 9.87 | 12.88 | 9.64 | 9.60 | 12.63 | 30.00 | -17.12 |

Table 7-43. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|------|-------|-------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | | | 40 | | | 44 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5190 | 38 | AVG | 52T | | 9.19 | 9.16 | 12.19 | 9.23 | 9.11 | 12.18 | 9.26 | 9.31 | 12.30 | 23.98 | -11.68 |
| 5230 | 46 | AVG | 52T | | 9.31 | 9.14 | 12.24 | 9.34 | 9.13 | 12.25 | 9.51 | 9.53 | 12.53 | 23.98 | -11.46 |
| 5270 | 54 | AVG | 52T | | 9.20 | 9.06 | 12.14 | 10.03 | 9.74 | 12.90 | 9.26 | 9.14 | 12.21 | 23.47 | -10.57 |
| 5310 | 62 | AVG | 52T | | 9.26 | 9.24 | 12.26 | 9.08 | 9.01 | 12.06 | 9.21 | 9.18 | 12.21 | 23.47 | -11.21 |
| 5510 | 102 | AVG | 52T | | 9.91 | 9.91 | 12.92 | 9.75 | 9.56 | 12.67 | 10.13 | 9.78 | 12.97 | 22.80 | -9.83 |
| 5590 | 118 | AVG | 52T | | 9.87 | 9.78 | 12.84 | 9.70 | 9.34 | 12.53 | 9.91 | 9.80 | 12.87 | 22.80 | -9.93 |
| 5710 | 142 | AVG | 52T | | 10.26 | 9.47 | 12.89 | 9.08 | 10.12 | 12.64 | 9.40 | 10.41 | 12.94 | 22.80 | -9.86 |
| 5755 | 151 | AVG | 52T | | 9.21 | 9.76 | 12.50 | 9.05 | 9.44 | 12.26 | 9.40 | 9.62 | 12.52 | 30.00 | -17.48 |
| 5795 | 159 | AVG | 52T | | 8.87 | 9.32 | 12.11 | 9.17 | 9.50 | 12.35 | 9.08 | 9.15 | 12.13 | 30.00 | -17.65 |

Table 7-44. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|------|-------|-------|------|-------|-------|------|-------|-----------------------------|-----------------------------|
| | | | | | 37 | | | 44 | | | 52 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5210 | 42 | AVG | 52T | | 9.20 | 8.96 | 12.09 | 9.71 | 9.47 | 12.60 | 9.32 | 9.26 | 12.30 | 23.98 | -11.38 |
| 5290 | 58 | AVG | 52T | | 9.97 | 9.87 | 12.93 | 9.52 | 9.26 | 12.40 | 9.19 | 8.96 | 12.09 | 23.47 | -10.54 |
| 5530 | 106 | AVG | 52T | | 9.89 | 9.63 | 12.77 | 9.21 | 8.95 | 12.09 | 9.82 | 9.59 | 12.72 | 22.80 | -10.03 |
| 5610 | 122 | AVG | 52T | | 9.81 | 9.58 | 12.71 | 10.10 | 9.81 | 12.97 | 9.90 | 9.48 | 12.71 | 22.80 | -9.83 |
| 5690 | 138 | AVG | 52T | | 9.99 | 9.56 | 12.79 | 10.38 | 9.50 | 12.97 | 10.10 | 9.09 | 12.63 | 22.80 | -9.83 |
| 5775 | 155 | AVG | 52T | | 8.96 | 9.56 | 12.28 | 9.52 | 9.70 | 12.62 | 9.30 | 9.13 | 12.23 | 30.00 | -17.38 |

Table 7-45. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 94 of 299 |

MIMO Conducted Output Power Measurements (106 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | | | 54 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5180 | 36 | AVG | 106T | 11.74 | 11.79 | 14.78 | 11.79 | 11.85 | 14.83 | 23.98 | -9.15 | |
| 5200 | 40 | AVG | 106T | 11.80 | 11.90 | 14.86 | 11.74 | 11.85 | 14.81 | 23.98 | -9.12 | |
| 5240 | 48 | AVG | 106T | 11.85 | 12.08 | 14.98 | 11.90 | 11.99 | 14.96 | 23.98 | -9.00 | |
| 5260 | 52 | AVG | 106T | 11.75 | 11.80 | 14.79 | 11.73 | 11.78 | 14.77 | 23.47 | -8.68 | |
| 5280 | 56 | AVG | 106T | 11.75 | 11.77 | 14.77 | 11.83 | 11.85 | 14.85 | 23.47 | -8.62 | |
| 5320 | 64 | AVG | 106T | 11.90 | 11.87 | 14.90 | 11.88 | 11.84 | 14.87 | 23.47 | -8.57 | |
| 5500 | 100 | AVG | 106T | 11.39 | 11.49 | 14.45 | 11.35 | 11.42 | 14.40 | 22.80 | -8.35 | |
| 5600 | 120 | AVG | 106T | 11.43 | 11.32 | 14.39 | 11.35 | 11.12 | 14.25 | 22.80 | -8.41 | |
| 5720 | 144 | AVG | 106T | 11.70 | 11.11 | 14.43 | 11.71 | 10.93 | 14.35 | 22.80 | -8.37 | |
| 5745 | 149 | AVG | 106T | 11.47 | 12.16 | 14.84 | 11.38 | 11.91 | 14.66 | 30.00 | -15.16 | |
| 5785 | 157 | AVG | 106T | 11.67 | 11.90 | 14.80 | 11.70 | 11.74 | 14.73 | 30.00 | -15.20 | |
| 5825 | 165 | AVG | 106T | 11.51 | 11.65 | 14.59 | 11.54 | 11.50 | 14.53 | 30.00 | -15.41 | |

Table 7-46. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | | | 54 | | | 56 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5190 | 38 | AVG | 106T | 11.48 | 11.48 | 14.49 | 11.12 | 11.15 | 14.15 | 11.42 | 11.73 | 14.59 | 23.98 | -9.39 | |
| 5230 | 46 | AVG | 106T | 11.58 | 11.62 | 14.61 | 11.26 | 11.18 | 14.23 | 11.61 | 11.82 | 14.73 | 23.98 | -9.25 | |
| 5270 | 54 | AVG | 106T | 11.40 | 11.37 | 14.40 | 12.04 | 11.90 | 14.98 | 11.53 | 11.53 | 14.54 | 23.47 | -8.49 | |
| 5310 | 62 | AVG | 106T | 11.50 | 11.62 | 14.57 | 11.14 | 11.08 | 14.12 | 11.50 | 11.61 | 14.57 | 23.47 | -8.90 | |
| 5510 | 102 | AVG | 106T | 11.12 | 11.25 | 14.20 | 11.67 | 11.67 | 14.68 | 11.27 | 11.28 | 14.29 | 22.80 | -8.12 | |
| 5590 | 118 | AVG | 106T | 11.05 | 11.14 | 14.11 | 11.59 | 11.51 | 14.56 | 11.07 | 11.20 | 14.15 | 22.80 | -8.24 | |
| 5710 | 142 | AVG | 106T | 11.40 | 10.73 | 14.09 | 11.92 | 11.24 | 14.60 | 11.43 | 11.69 | 14.57 | 22.80 | -8.20 | |
| 5755 | 151 | AVG | 106T | 11.54 | 11.80 | 14.68 | 11.01 | 11.34 | 14.19 | 11.45 | 11.73 | 14.60 | 30.00 | -15.32 | |
| 5795 | 159 | AVG | 106T | 11.05 | 11.46 | 14.27 | 11.15 | 11.34 | 14.26 | 11.26 | 11.30 | 14.29 | 30.00 | -15.71 | |

Table 7-47. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 53 | | | 56 | | | 60 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5210 | 42 | AVG | 106T | 11.24 | 11.27 | 14.27 | 11.68 | 11.66 | 14.68 | 11.48 | 11.61 | 14.56 | 23.98 | -8.30 | |
| 5290 | 58 | AVG | 106T | 11.12 | 11.16 | 14.15 | 11.56 | 11.51 | 14.55 | 11.30 | 11.27 | 14.30 | 23.47 | -8.92 | |
| 5530 | 106 | AVG | 106T | 11.88 | 11.87 | 14.89 | 11.17 | 11.24 | 14.22 | 11.87 | 11.84 | 14.87 | 22.80 | -7.91 | |
| 5610 | 122 | AVG | 106T | 11.79 | 11.75 | 14.78 | 12.03 | 11.86 | 14.96 | 11.89 | 11.86 | 14.79 | 22.80 | -7.84 | |
| 5690 | 138 | AVG | 106T | 11.99 | 11.98 | 14.80 | 12.30 | 11.59 | 14.97 | 12.21 | 11.37 | 14.82 | 22.80 | -7.83 | |
| 5775 | 155 | AVG | 106T | 11.14 | 11.97 | 14.37 | 11.54 | 11.63 | 14.60 | 11.38 | 11.32 | 14.36 | 30.00 | -15.40 | |

Table 7-48. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 95 of 299 |

MIMO Conducted Output Power Measurements (242 Tones)

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 61 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | | |
| 5180 | 36 | AVG | 242T | 10.71 | 10.72 | 13.73 | 23.98 | -10.25 | |
| 5200 | 40 | AVG | 242T | 13.78 | 13.68 | 16.74 | 23.98 | -7.24 | |
| 5240 | 48 | AVG | 242T | 13.93 | 13.92 | 16.94 | 23.98 | -7.04 | |
| 5260 | 52 | AVG | 242T | 13.50 | 13.69 | 16.61 | 23.47 | -6.86 | |
| 5280 | 56 | AVG | 242T | 13.61 | 13.65 | 16.64 | 23.47 | -6.83 | |
| 5320 | 64 | AVG | 242T | 11.83 | 11.75 | 14.80 | 23.47 | -8.67 | |
| 5500 | 100 | AVG | 242T | 13.10 | 13.30 | 16.21 | 22.80 | -6.59 | |
| 5600 | 120 | AVG | 242T | 13.23 | 13.18 | 16.22 | 22.80 | -6.58 | |
| 5720 | 144 | AVG | 242T | 13.61 | 13.00 | 16.33 | 22.80 | -6.47 | |
| 5745 | 149 | AVG | 242T | 13.48 | 13.92 | 16.72 | 30.00 | -13.28 | |
| 5785 | 157 | AVG | 242T | 13.52 | 13.67 | 16.61 | 30.00 | -13.39 | |
| 5825 | 165 | AVG | 242T | 13.38 | 13.48 | 16.44 | 30.00 | -13.56 | |

Table 7-49. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 61 | | | 62 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5190 | 38 | AVG | 242T | 12.67 | 12.79 | 15.74 | 12.65 | 13.00 | 15.84 | 23.98 | -8.14 | |
| 5230 | 46 | AVG | 242T | 12.84 | 12.88 | 15.87 | 12.83 | 13.10 | 15.98 | 23.98 | -8.00 | |
| 5270 | 54 | AVG | 242T | 12.62 | 12.62 | 15.63 | 12.67 | 12.84 | 15.77 | 23.47 | -7.70 | |
| 5310 | 62 | AVG | 242T | 11.76 | 11.91 | 14.85 | 11.78 | 11.90 | 14.85 | 23.47 | -8.62 | |
| 5510 | 102 | AVG | 242T | 12.27 | 12.24 | 15.27 | 12.46 | 12.42 | 15.45 | 22.80 | -7.35 | |
| 5590 | 118 | AVG | 242T | 12.21 | 12.12 | 15.18 | 12.29 | 12.34 | 15.33 | 22.80 | -7.47 | |
| 5710 | 142 | AVG | 242T | 12.56 | 11.85 | 15.23 | 12.70 | 11.95 | 15.35 | 22.80 | -7.45 | |
| 5755 | 151 | AVG | 242T | 12.68 | 12.91 | 15.81 | 12.78 | 12.95 | 15.88 | 30.00 | -14.12 | |
| 5795 | 159 | AVG | 242T | 12.56 | 12.73 | 15.66 | 12.64 | 12.70 | 15.68 | 30.00 | -14.32 | |

Table 7-50. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 61 | | | 62 | | | 64 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5210 | 42 | AVG | 242T | 11.58 | 11.52 | 14.56 | 11.79 | 11.87 | 14.84 | 11.80 | 11.94 | 14.88 | 23.98 | -9.10 | |
| 5290 | 58 | AVG | 242T | 11.45 | 11.42 | 14.45 | 11.70 | 11.70 | 14.71 | 11.54 | 11.57 | 14.57 | 23.47 | -8.76 | |
| 5530 | 106 | AVG | 242T | 11.28 | 11.21 | 14.26 | 11.31 | 11.23 | 14.28 | 11.30 | 11.31 | 14.32 | 22.80 | -8.48 | |
| 5610 | 122 | AVG | 242T | 11.18 | 11.06 | 14.13 | 11.39 | 11.11 | 14.26 | 11.32 | 11.17 | 14.26 | 22.80 | -8.54 | |
| 5690 | 138 | AVG | 242T | 11.42 | 10.87 | 14.16 | 11.46 | 10.81 | 14.16 | 11.54 | 10.82 | 14.21 | 22.80 | -8.59 | |
| 5775 | 155 | AVG | 242T | 11.50 | 11.72 | 14.62 | 11.66 | 11.93 | 14.81 | 11.74 | 11.62 | 14.69 | 30.00 | -15.19 | |

Table 7-51. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 96 of 299 |

MIMO Conducted Output Power Measurements (484 Tones)

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 65 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | | |
| 5190 | 38 | AVG | 484T | 8.54 | 8.63 | 11.60 | 23.98 | -12.38 | |
| 5230 | 46 | AVG | 484T | 12.62 | 12.84 | 15.74 | 23.98 | -8.24 | |
| 5270 | 54 | AVG | 484T | 12.43 | 12.46 | 15.46 | 23.47 | -8.01 | |
| 5310 | 62 | AVG | 484T | 7.42 | 7.32 | 10.38 | 23.47 | -13.09 | |
| 5510 | 102 | AVG | 484T | 10.27 | 10.13 | 13.21 | 22.80 | -9.59 | |
| 5590 | 118 | AVG | 484T | 13.03 | 12.92 | 15.99 | 22.80 | -6.81 | |
| 5710 | 142 | AVG | 484T | 13.33 | 12.59 | 15.99 | 22.80 | -6.81 | |
| 5755 | 151 | AVG | 484T | 12.41 | 12.79 | 15.61 | 30.00 | -14.39 | |
| 5795 | 159 | AVG | 484T | 12.35 | 12.61 | 15.49 | 30.00 | -14.51 | |

Table 7-52. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 65 | | | 66 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | ANT1 | ANT2 | MIMO | | |
| 5210 | 42 | AVG | 484T | 10.43 | 10.33 | 13.39 | 9.65 | 9.78 | 12.73 | 23.98 | -10.59 | |
| 5290 | 58 | AVG | 484T | 8.21 | 8.09 | 11.16 | 8.39 | 8.26 | 11.34 | 23.47 | -12.13 | |
| 5530 | 106 | AVG | 484T | 11.00 | 10.94 | 13.98 | 11.14 | 11.11 | 14.14 | 22.80 | -8.66 | |
| 5610 | 122 | AVG | 484T | 11.88 | 11.87 | 14.89 | 12.07 | 11.86 | 14.98 | 22.80 | -7.82 | |
| 5690 | 138 | AVG | 484T | 12.09 | 11.76 | 14.94 | 12.30 | 11.60 | 14.97 | 22.80 | -7.83 | |
| 5775 | 155 | AVG | 484T | 11.24 | 11.72 | 14.50 | 11.45 | 11.60 | 14.54 | 30.00 | -15.46 | |

Table 7-53. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 97 of 299 |

MIMO Conducted Output Power Measurements (996 Tones)

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Tones | RU Index | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|------------------------|------------|---------|----------|-------|----------|-------|-------|-----------------------------|-----------------------------|
| | | | | | 67 | | | | |
| | | | | | ANT1 | ANT2 | MIMO | | |
| | 5210 | 42 | AVG | 996T | 9.46 | 9.46 | 12.47 | 23.98 | -11.51 |
| | 5290 | 58 | AVG | 996T | 7.31 | 6.82 | 10.08 | 23.47 | -13.39 |
| | 5530 | 106 | AVG | 996T | 9.13 | 9.42 | 12.29 | 22.80 | -10.51 |
| | 5610 | 122 | AVG | 996T | 11.74 | 12.18 | 14.98 | 22.80 | -7.82 |
| | 5690 | 138 | AVG | 996T | 11.27 | 11.14 | 14.22 | 22.80 | -8.58 |
| | 5775 | 155 | AVG | 996T | 11.37 | 12.04 | 14.73 | 30.00 | -15.27 |

Table 7-54. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (996 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 98 of 299 |

Note:

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna 1 and Antenna 2 were first measured separately during MIMO transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

| | | | | |
|--|---|---|---|--|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 99 of 299 |

7.5 Maximum Power Spectral Density – 802.11ax OFDMA §15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density.

In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.

In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2
 KDB 789033 D02 v02r01 – Section F
 ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique
 KDB 662911 v02r01 – Section E)2) Measure-and-Sum Technique

Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times$ (span/RBW)
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-4. Test Instrument & Measurement Setup

Test Notes

The power spectral density for each channel was measured with the RU index showing the highest conducted power

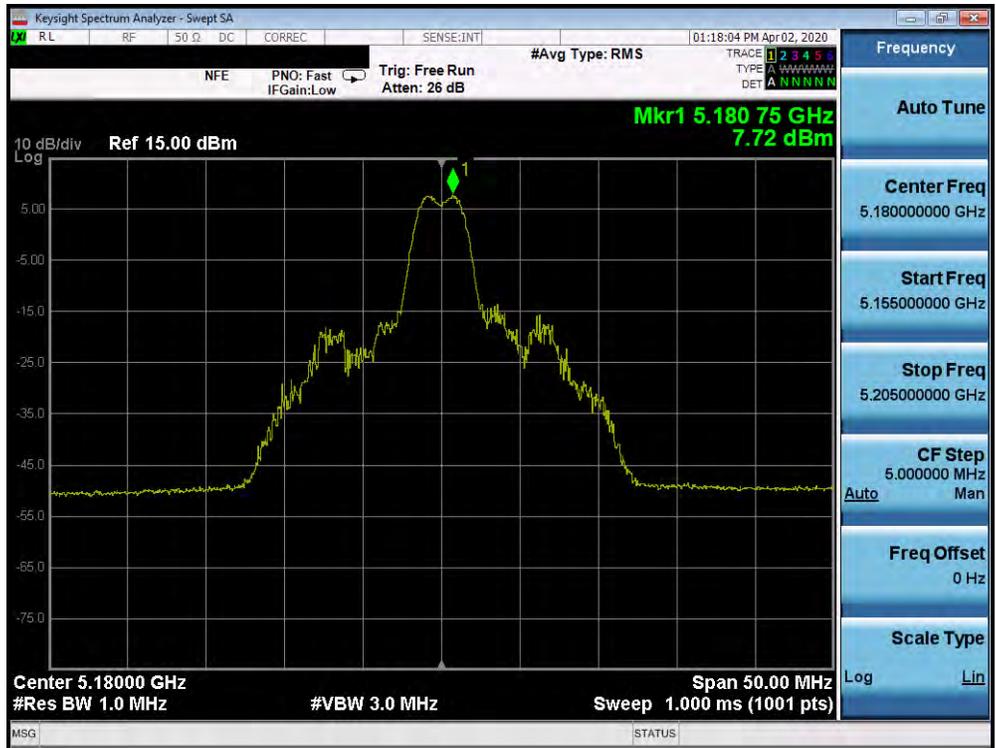
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 100 of 299 |

SISO Antenna-1 Power Spectral Density Measurements (26 Tones)

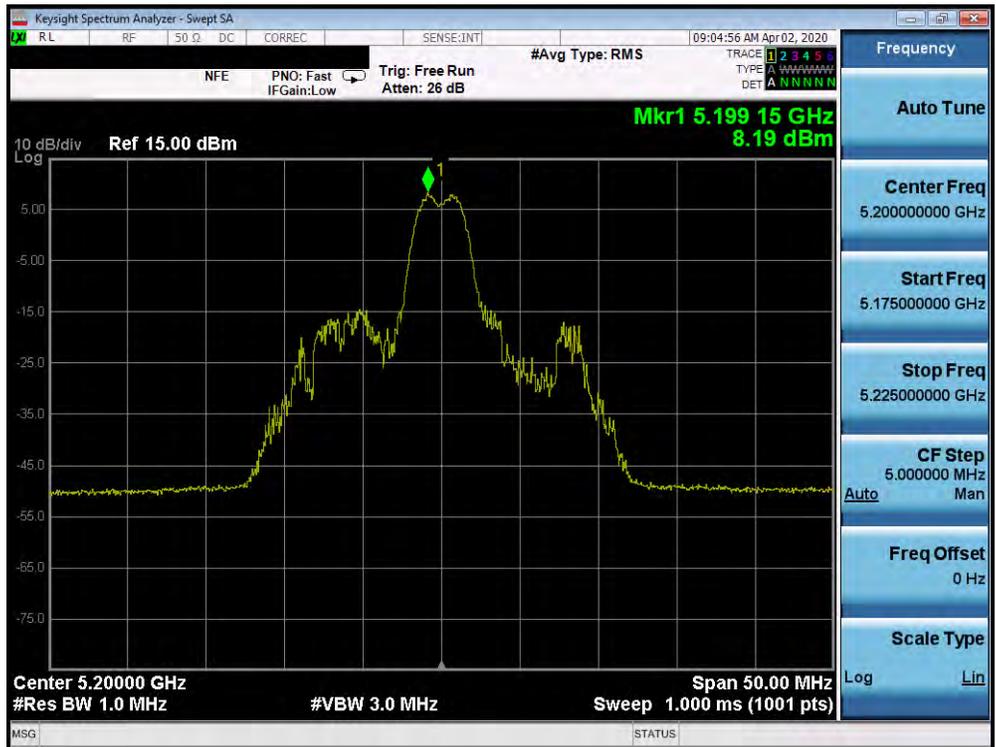
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1 | 5180 | 36 | ax (20MHz) | 26T | MCS0 | 7.73 | 11.0 | -3.28 |
| | 5200 | 40 | ax (20MHz) | 26T | MCS0 | 8.19 | 11.0 | -2.81 |
| | 5240 | 48 | ax (20MHz) | 26T | MCS0 | 7.86 | 11.0 | -3.14 |
| | 5190 | 38 | ax (40MHz) | 26T | MCS0 | 8.01 | 11.0 | -2.99 |
| | 5230 | 46 | ax (40MHz) | 26T | MCS0 | 8.59 | 11.0 | -2.41 |
| | 5210 | 42 | ax (80MHz) | 26T | MCS0 | 7.60 | 11.0 | -3.40 |
| Band 2A | 5260 | 52 | ax (20MHz) | 26T | MCS0 | 8.25 | 11.0 | -2.75 |
| | 5280 | 56 | ax (20MHz) | 26T | MCS0 | 7.85 | 11.0 | -3.15 |
| | 5320 | 64 | ax (20MHz) | 26T | MCS0 | 7.48 | 11.0 | -3.52 |
| | 5270 | 54 | ax (40MHz) | 26T | MCS0 | 9.09 | 11.0 | -1.91 |
| | 5310 | 62 | ax (40MHz) | 26T | MCS0 | 8.23 | 11.0 | -2.77 |
| | 5290 | 58 | ax (80MHz) | 26T | MCS0 | 6.95 | 11.0 | -4.05 |
| Band 2C | 5500 | 100 | ax (20MHz) | 26T | MCS0 | 7.56 | 11.0 | -3.45 |
| | 5600 | 120 | ax (20MHz) | 26T | MCS0 | 6.68 | 11.0 | -4.32 |
| | 5720 | 144 | ax (20MHz) | 26T | MCS0 | 7.19 | 11.0 | -3.81 |
| | 5510 | 102 | ax (40MHz) | 26T | MCS0 | 8.72 | 11.0 | -2.28 |
| | 5590 | 118 | ax (40MHz) | 26T | MCS0 | 8.65 | 11.0 | -2.35 |
| | 5710 | 142 | ax (40MHz) | 26T | MCS0 | 8.24 | 11.0 | -2.76 |
| | 5530 | 106 | ax (80MHz) | 26T | MCS0 | 6.54 | 11.0 | -4.46 |
| | 5610 | 122 | ax (80MHz) | 26T | MCS0 | 6.61 | 11.0 | -4.39 |
| | 5690 | 138 | ax (80MHz) | 26T | MCS0 | 4.93 | 11.0 | -6.07 |

Table 7-55. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 101 of 299 |

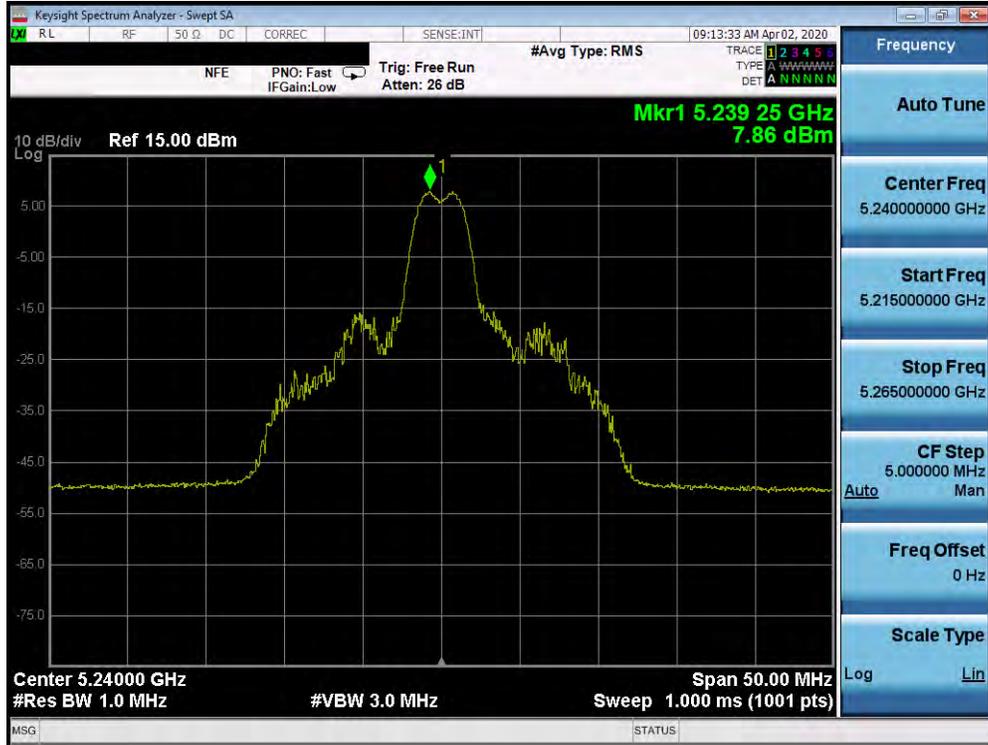


Plot 7-109. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 36)

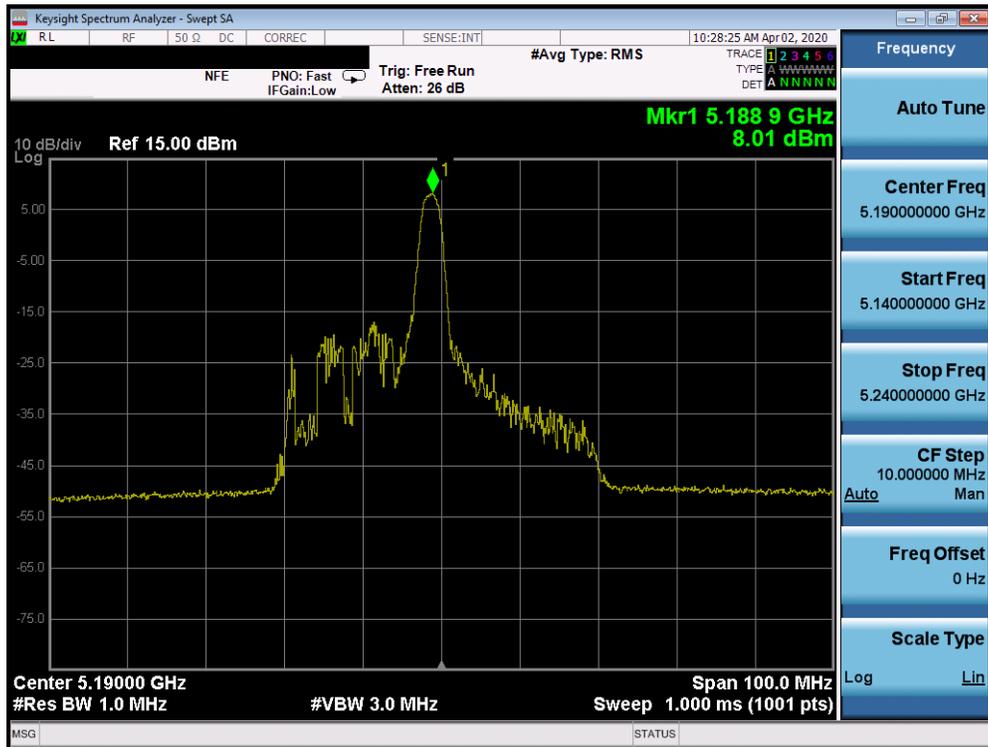


Plot 7-110. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 40)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 102 of 299 |



Plot 7-111. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 48)

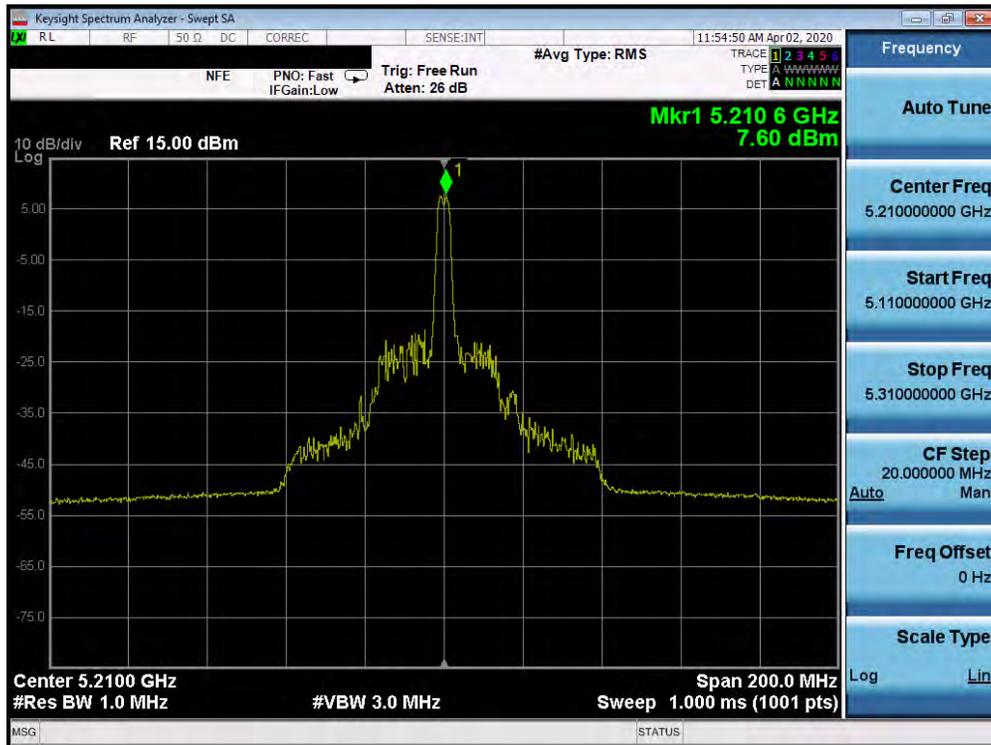


Plot 7-112. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 38)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 103 of 299 |

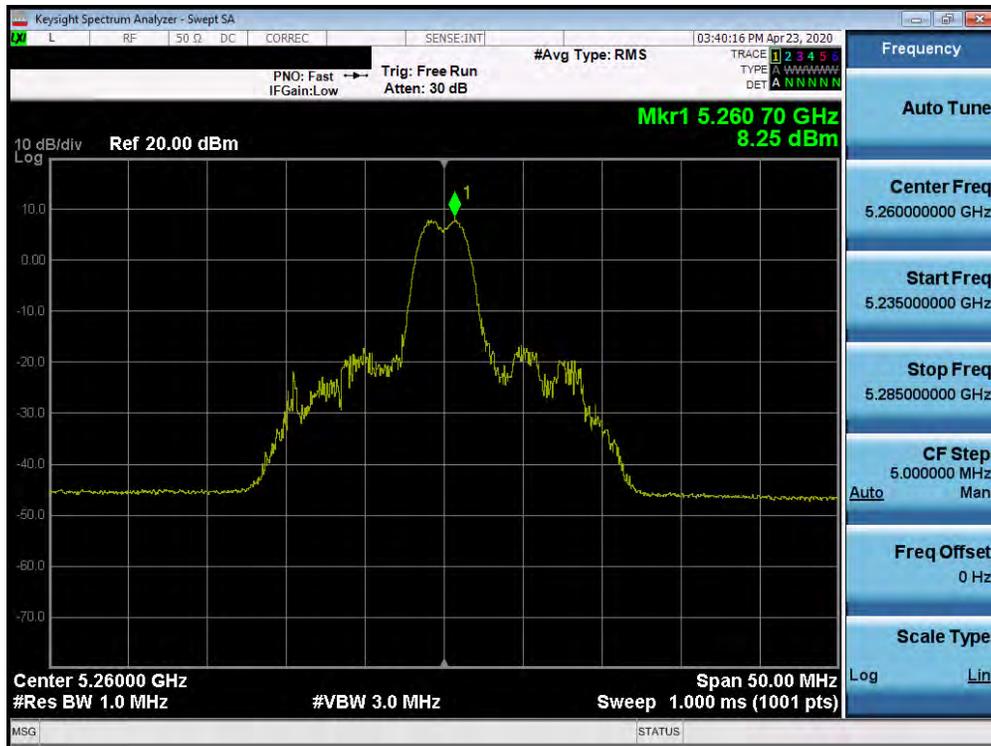


Plot 7-113. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)



Plot 7-114. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 42)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 104 of 299 |

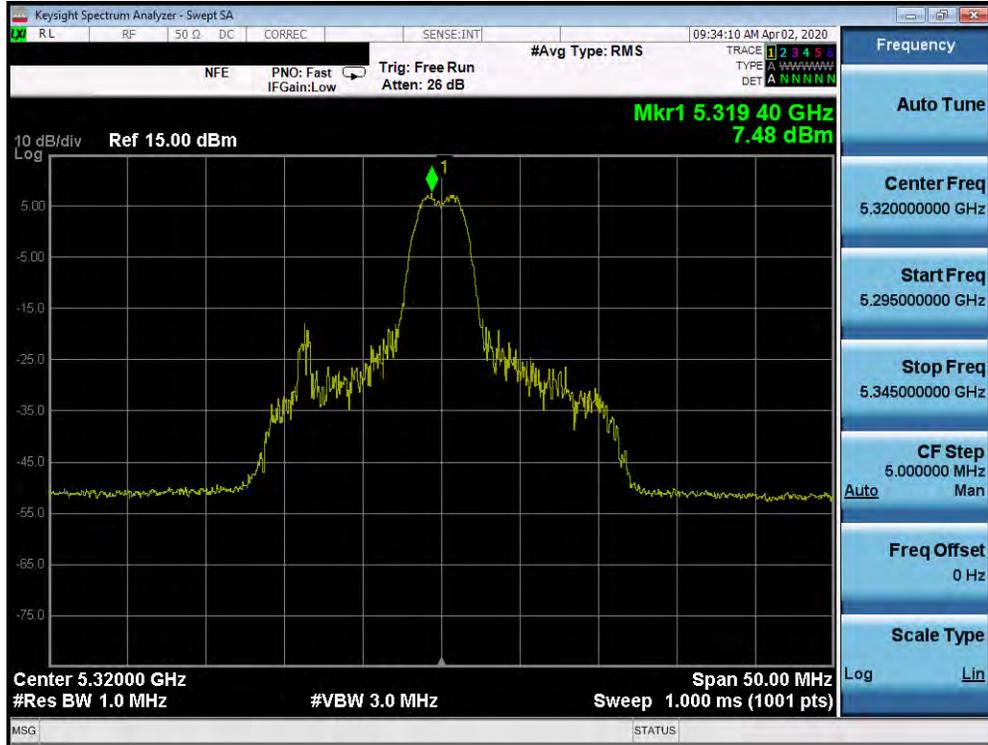


Plot 7-115. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 52)

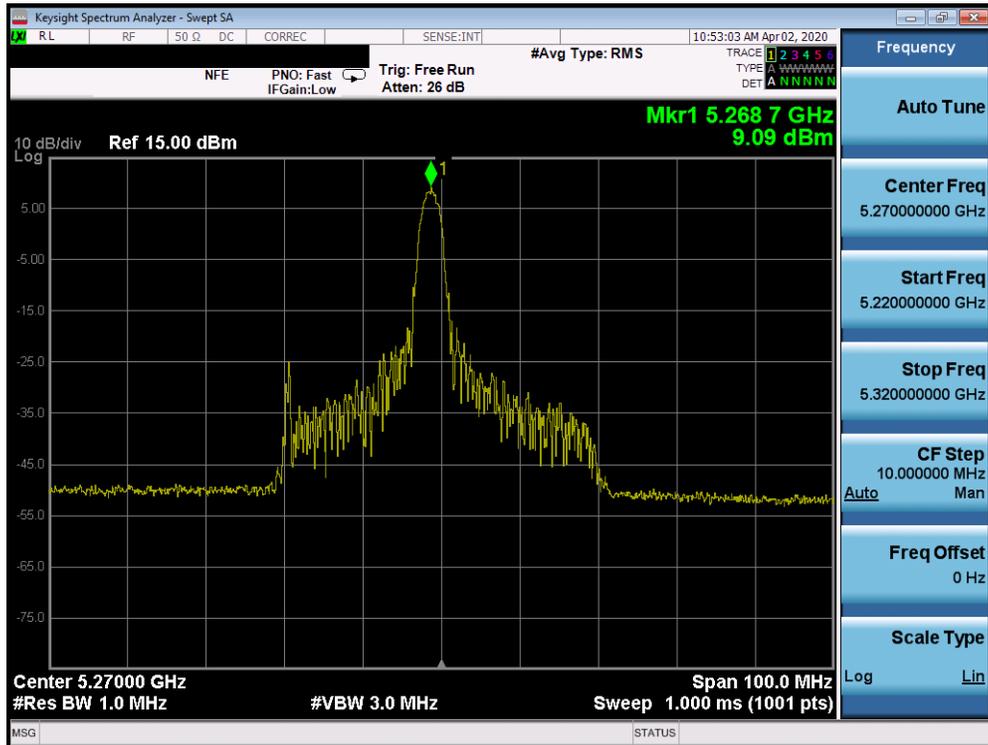


Plot 7-116. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 56)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 105 of 299 |

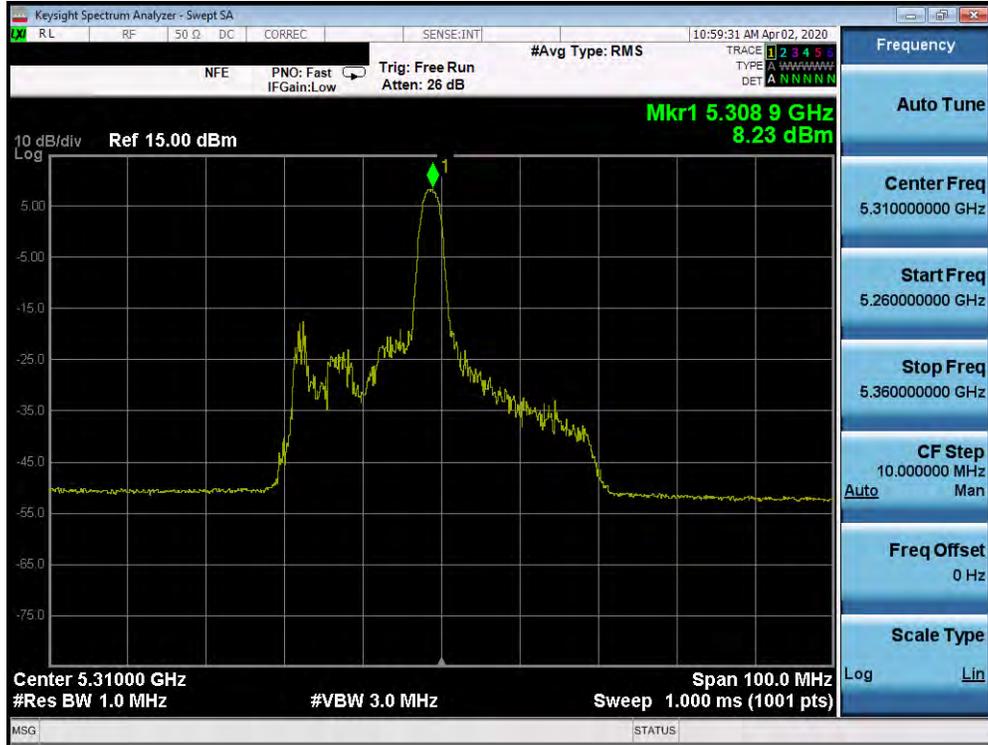


Plot 7-117. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 64)

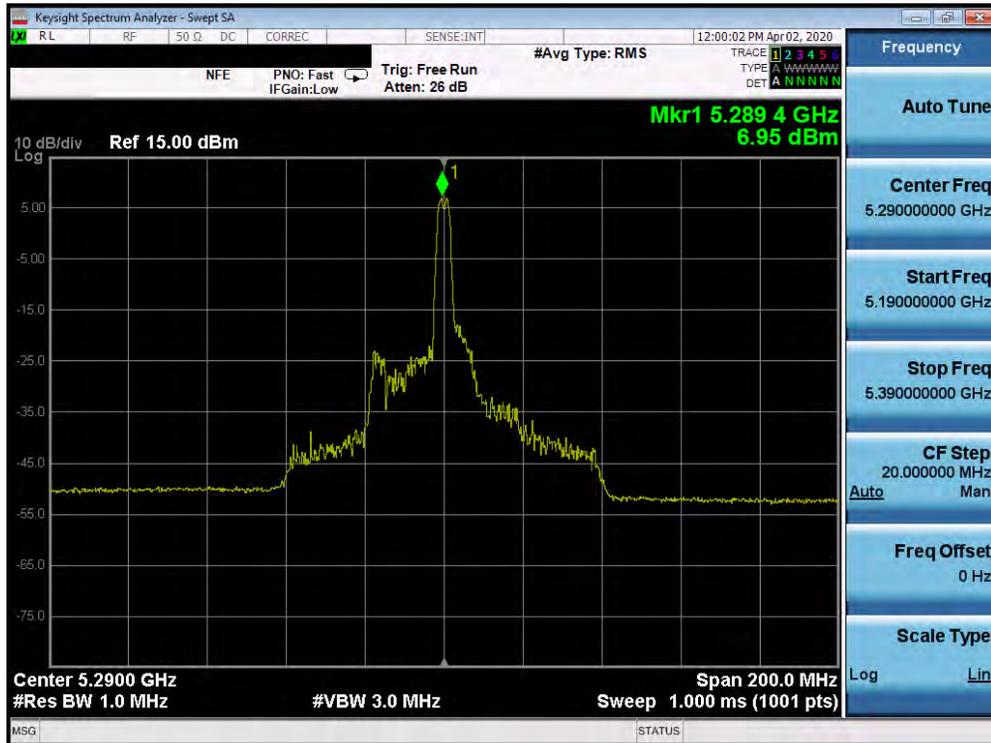


Plot 7-118. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 54)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 106 of 299 |

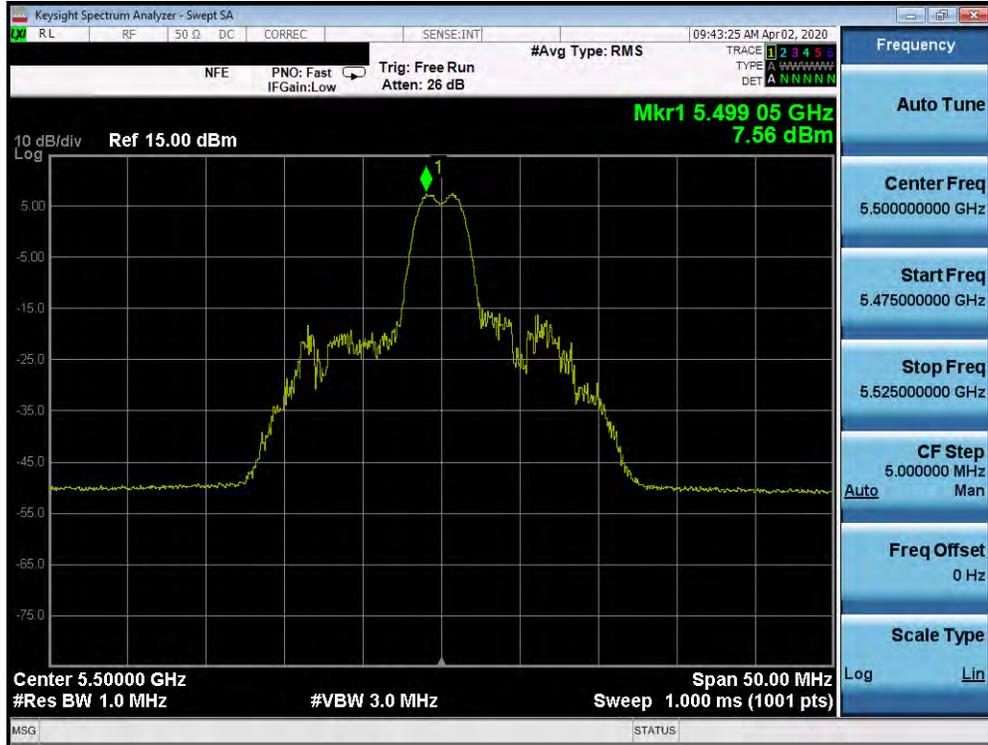


Plot 7-119. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

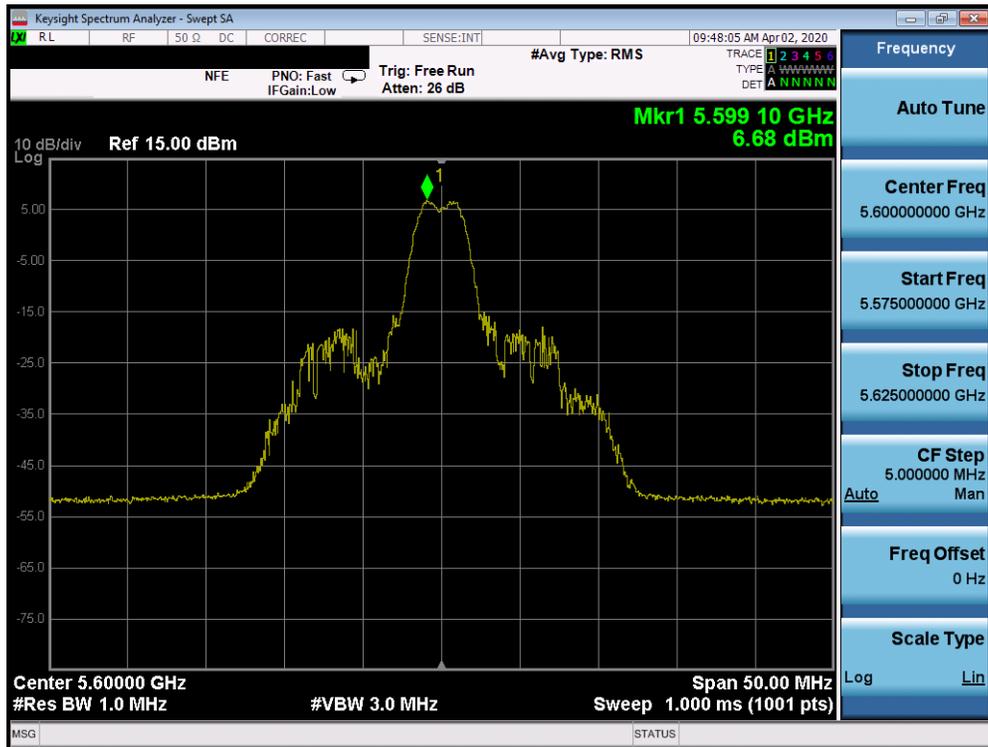


Plot 7-120. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 107 of 299 |

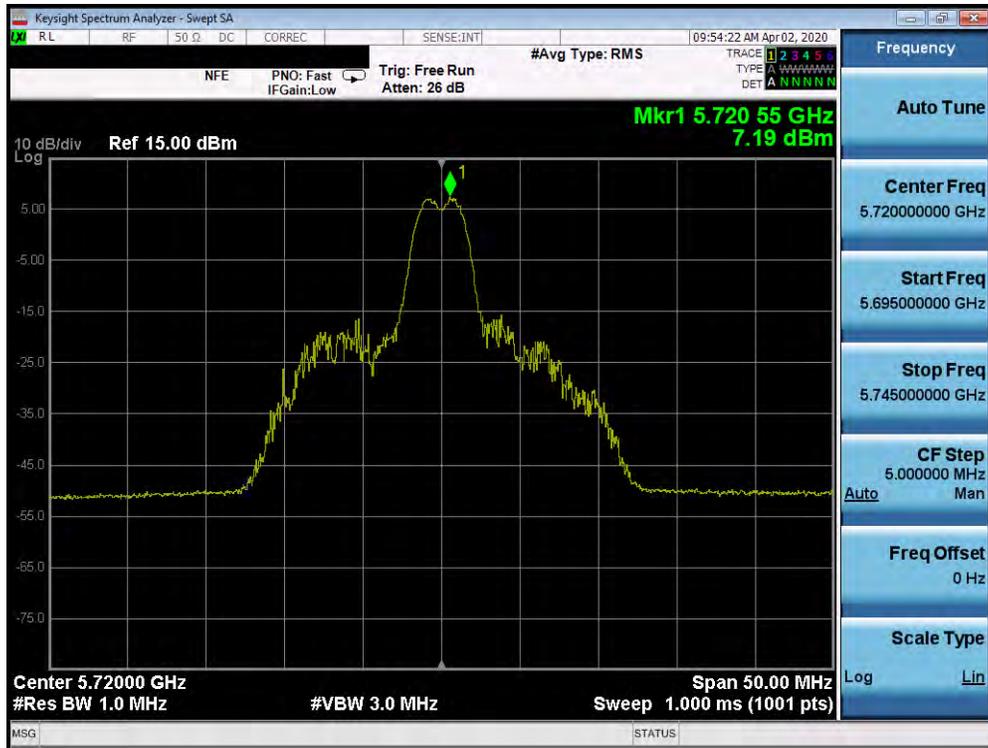


Plot 7-121. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

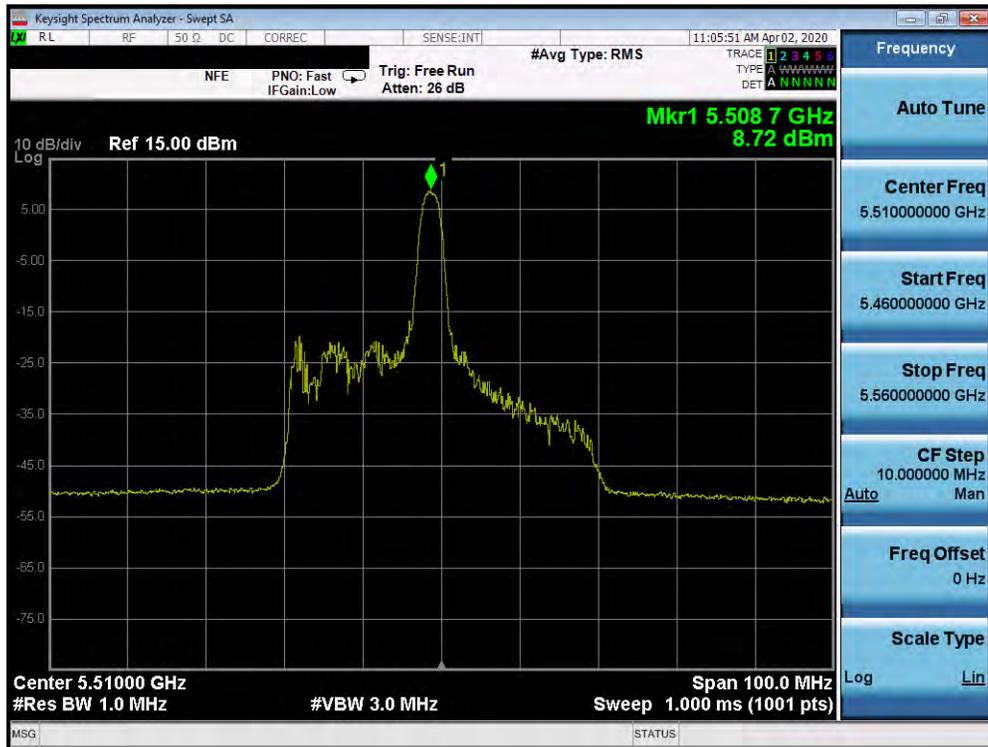


Plot 7-122. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 108 of 299 |

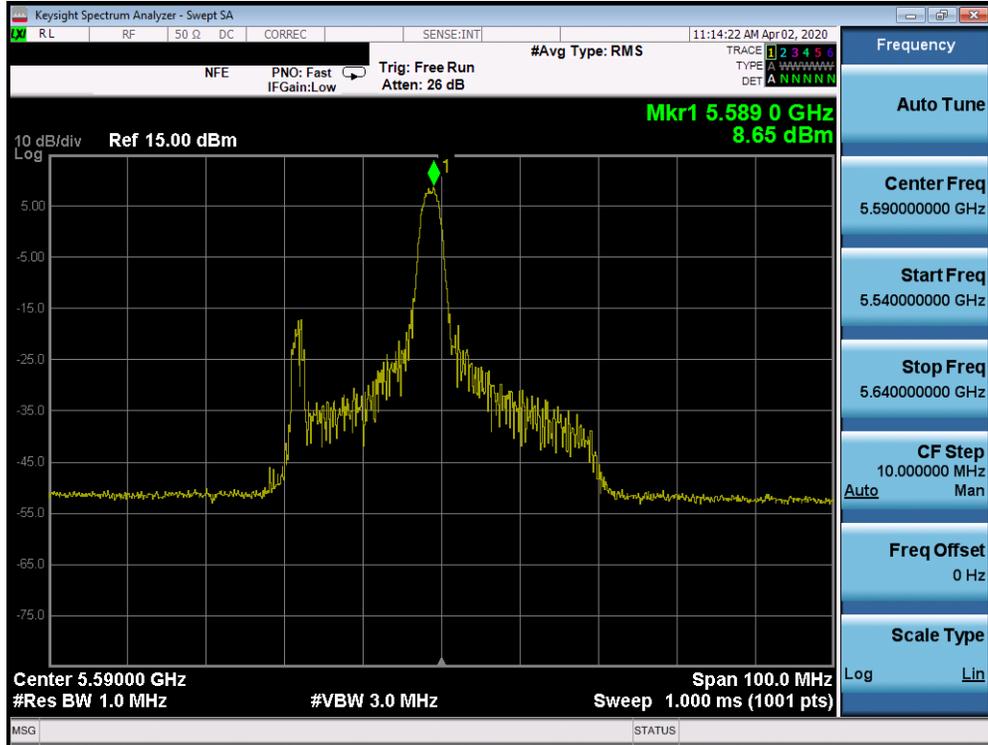


Plot 7-123. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

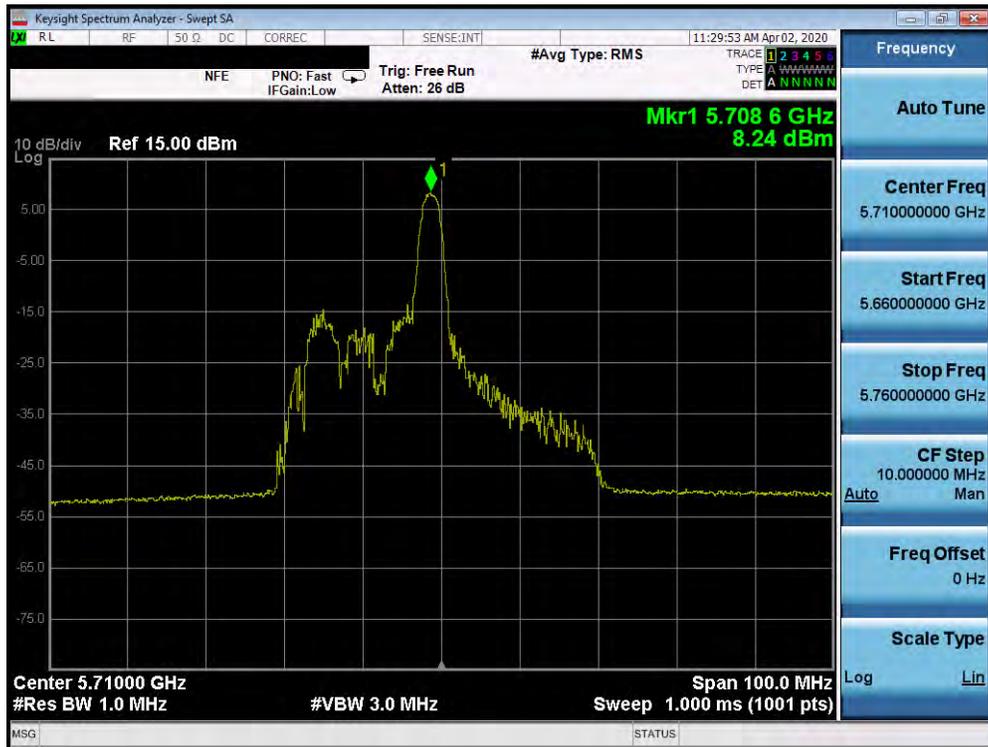


Plot 7-124. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 109 of 299 |

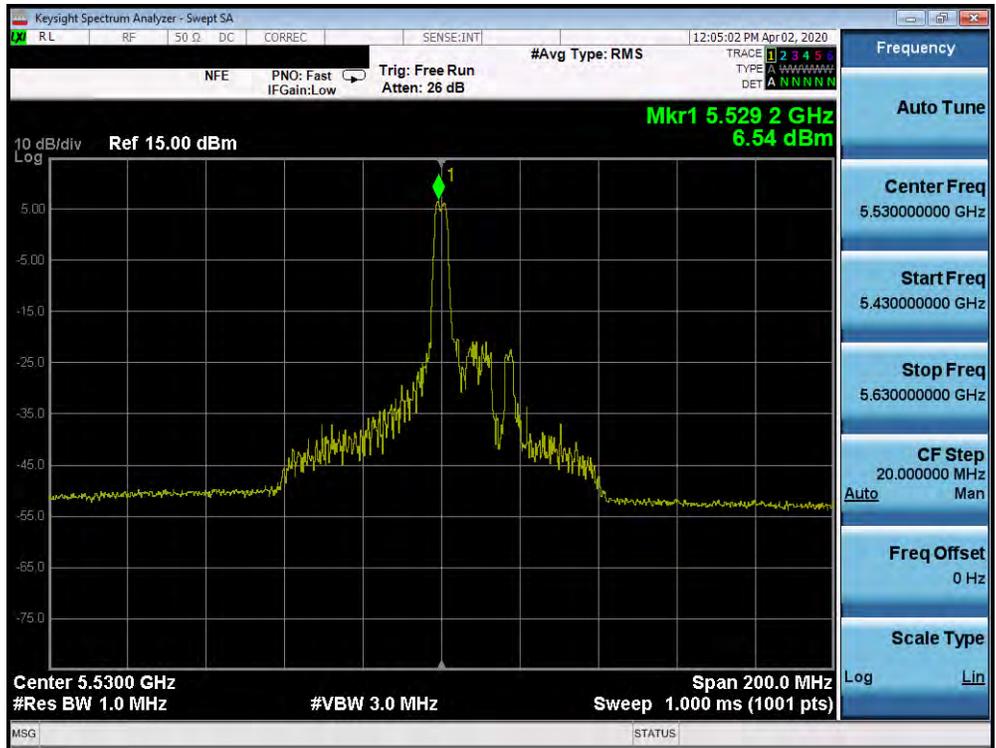


Plot 7-125. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

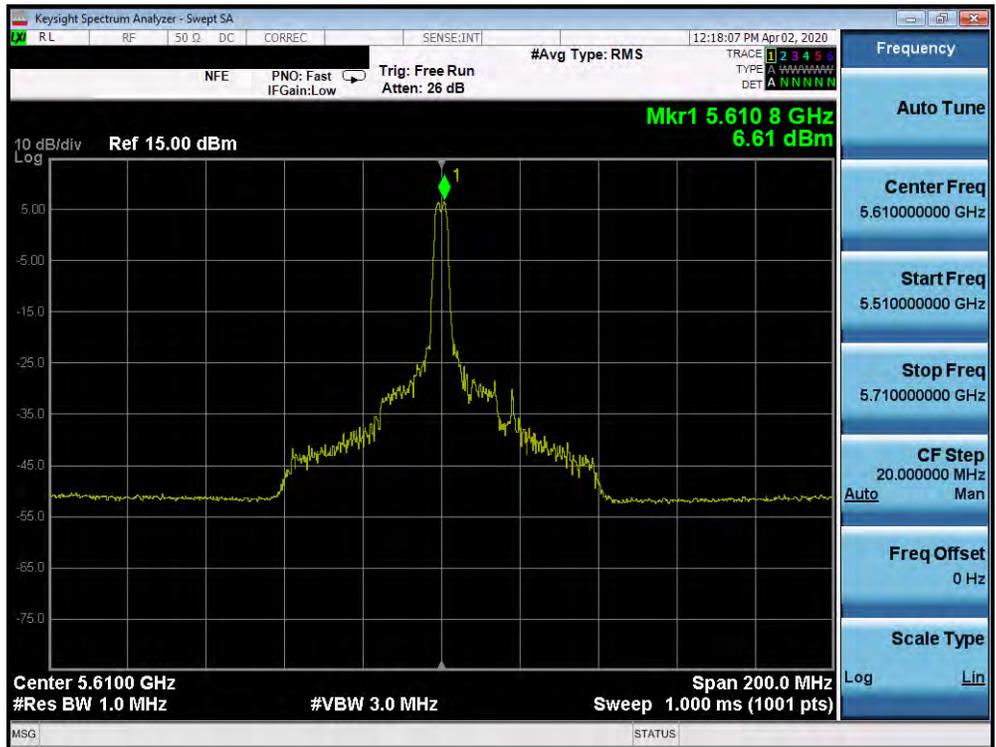


Plot 7-126. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 110 of 299 |



Plot 7-127. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)

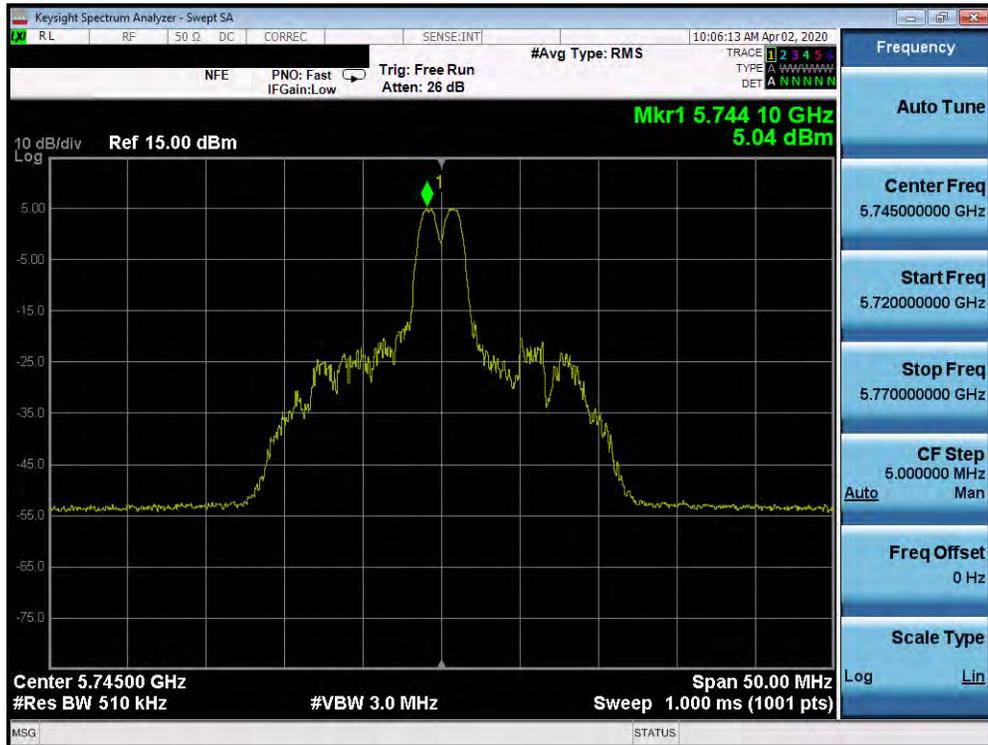


Plot 7-128. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 111 of 299 |



Plot 7-129. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

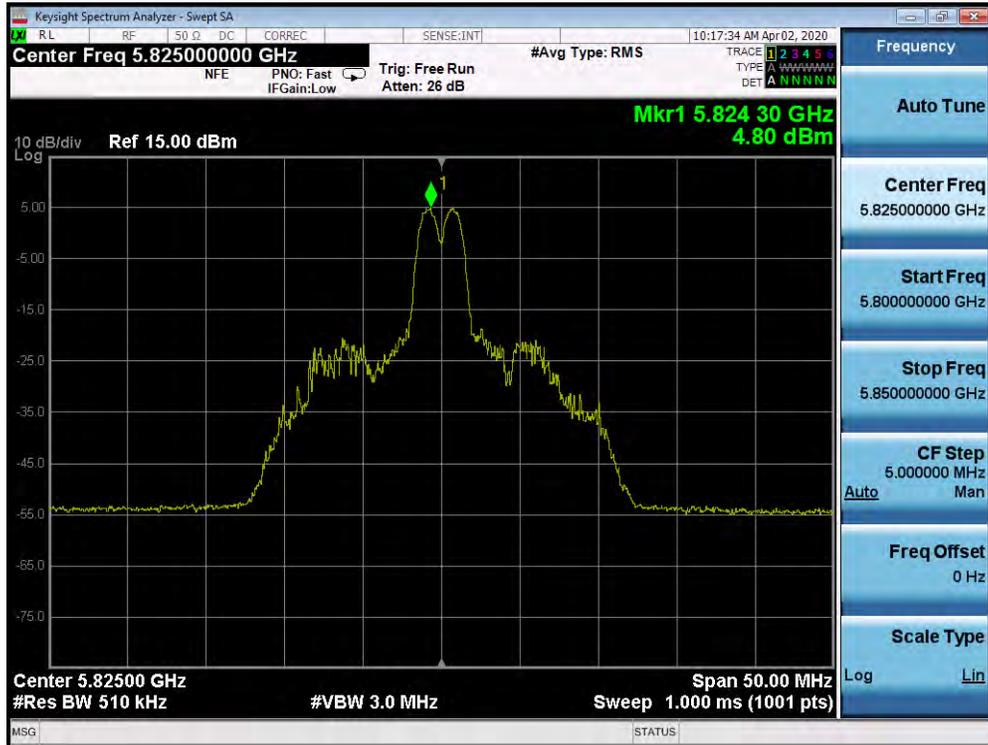


Plot 7-130. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 112 of 299 |

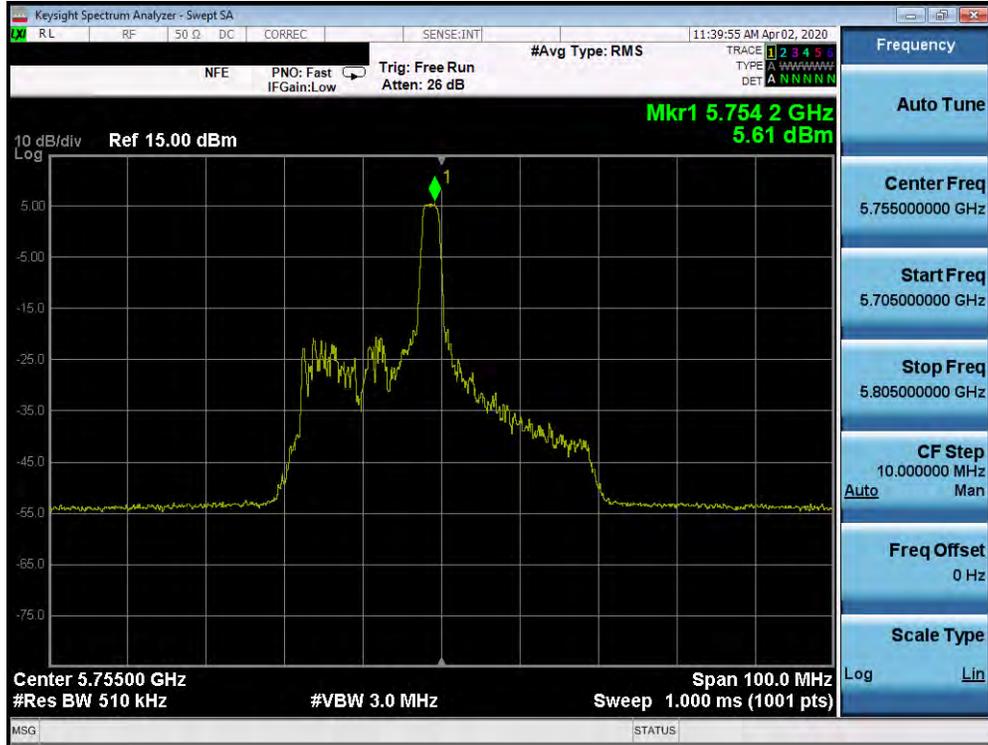


Plot 7-131. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

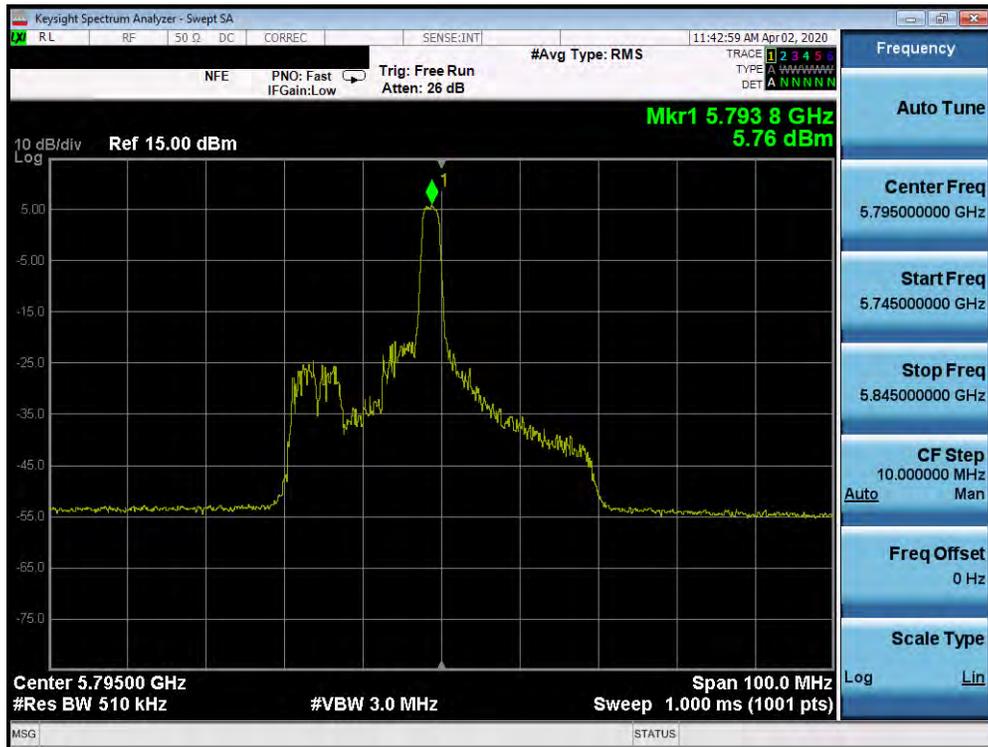


Plot 7-132. Power Spectral Density Plot SISO ANT1 (20 MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 113 of 299 |



Plot 7-133. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)



Plot 7-134. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 114 of 299 |



Plot 7-135. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

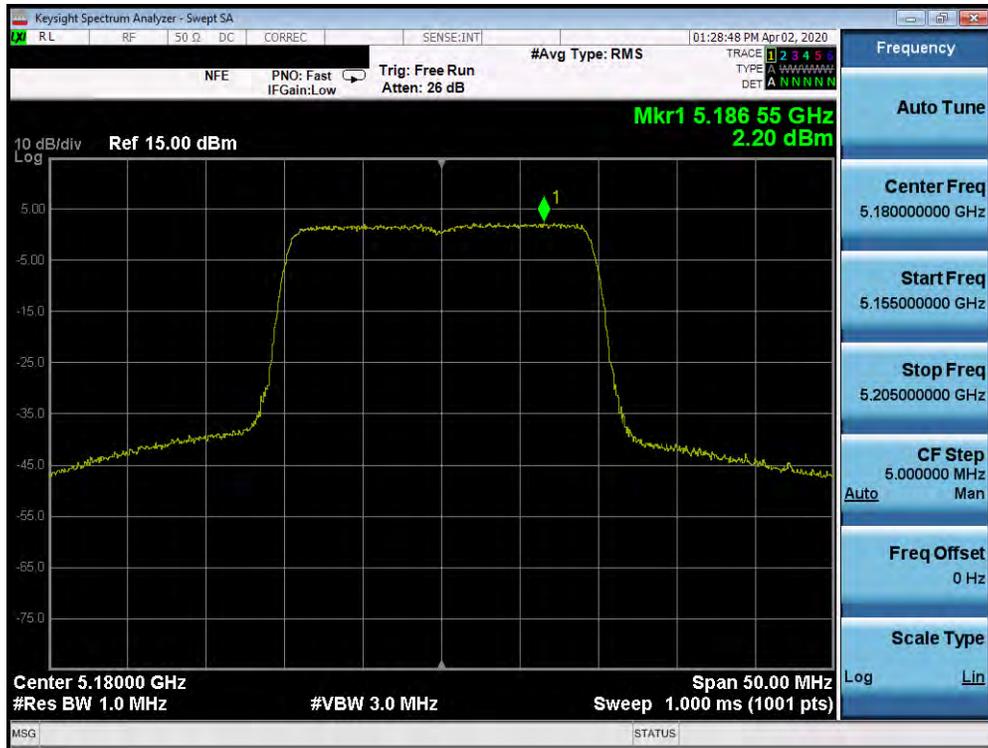
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 115 of 299 |

SISO Antenna-1 Power Spectral Density Measurements (Full Tones)

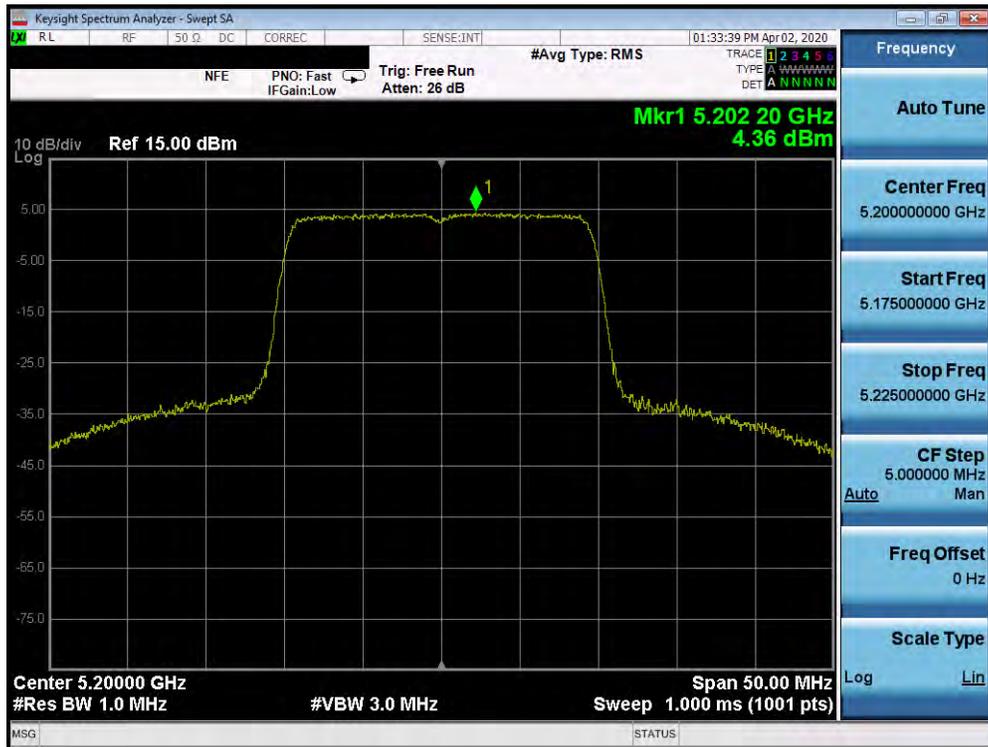
| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---------|-----------------|-------------|-------------|-------|------------------|------------------------------|-----------------------------|-------------|
| Band 1 | 5180 | 36 | ax (20MHz) | 242T | MCS0 | 2.21 | 11.0 | -8.80 |
| | 5200 | 40 | ax (20MHz) | 242T | MCS0 | 4.36 | 11.0 | -6.64 |
| | 5240 | 48 | ax (20MHz) | 242T | MCS0 | 4.22 | 11.0 | -6.78 |
| | 5190 | 38 | ax (40MHz) | 484T | MCS0 | -2.26 | 11.0 | -13.26 |
| | 5230 | 46 | ax (40MHz) | 484T | MCS0 | 1.77 | 11.0 | -9.23 |
| | 5210 | 42 | ax (80MHz) | 996T | MCS0 | -9.11 | 11.0 | -20.11 |
| Band 2A | 5260 | 52 | ax (20MHz) | 242T | MCS0 | 3.99 | 11.0 | -7.01 |
| | 5280 | 56 | ax (20MHz) | 242T | MCS0 | 4.12 | 11.0 | -6.89 |
| | 5320 | 64 | ax (20MHz) | 242T | MCS0 | 3.55 | 11.0 | -7.45 |
| | 5270 | 54 | ax (40MHz) | 484T | MCS0 | 1.03 | 11.0 | -9.98 |
| | 5310 | 62 | ax (40MHz) | 484T | MCS0 | -3.76 | 11.0 | -14.76 |
| | 5290 | 58 | ax (80MHz) | 996T | MCS0 | -10.54 | 11.0 | -21.54 |
| Band 2C | 5500 | 100 | ax (20MHz) | 242T | MCS0 | 4.29 | 11.0 | -6.71 |
| | 5600 | 120 | ax (20MHz) | 242T | MCS0 | 3.82 | 11.0 | -7.18 |
| | 5720 | 144 | ax (20MHz) | 242T | MCS0 | 3.04 | 11.0 | -7.96 |
| | 5510 | 102 | ax (40MHz) | 484T | MCS0 | -0.07 | 11.0 | -11.07 |
| | 5590 | 118 | ax (40MHz) | 484T | MCS0 | 1.43 | 11.0 | -9.57 |
| | 5710 | 142 | ax (40MHz) | 484T | MCS0 | 0.85 | 11.0 | -10.15 |
| | 5530 | 106 | ax (80MHz) | 996T | MCS0 | -10.00 | 11.0 | -21.00 |
| | 5610 | 122 | ax (80MHz) | 996T | MCS0 | -2.63 | 11.0 | -13.63 |
| | 5690 | 138 | ax (80MHz) | 996T | MCS0 | -2.23 | 11.0 | -13.23 |

Table 7-56. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1 (Full Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | Page 116 of 299 | |

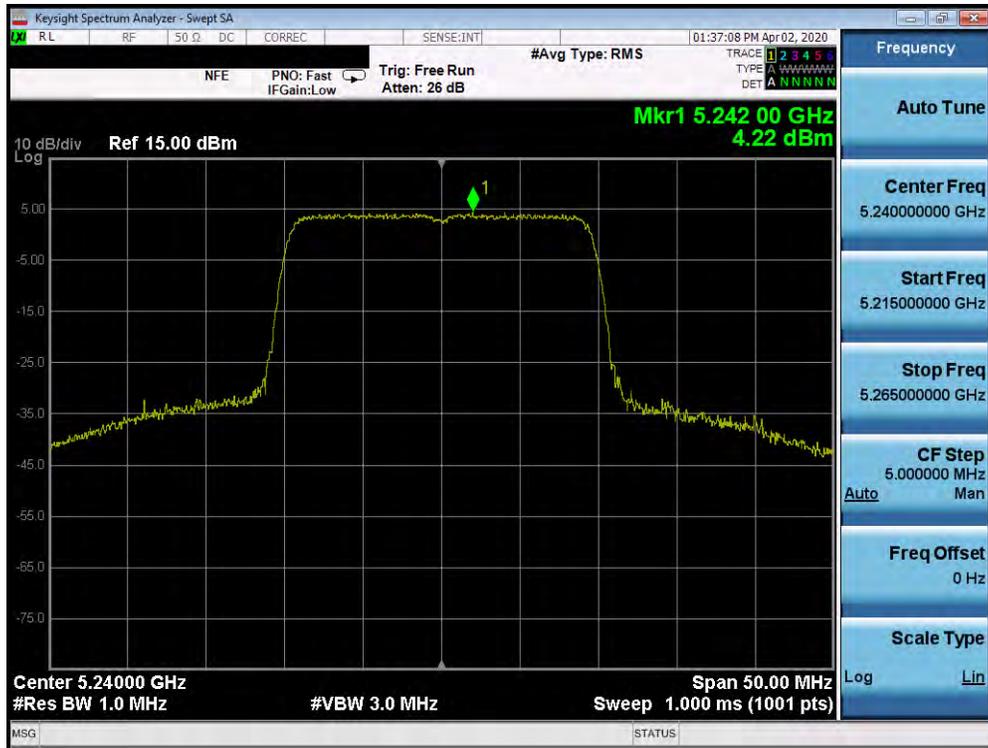


Plot 7-136. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)

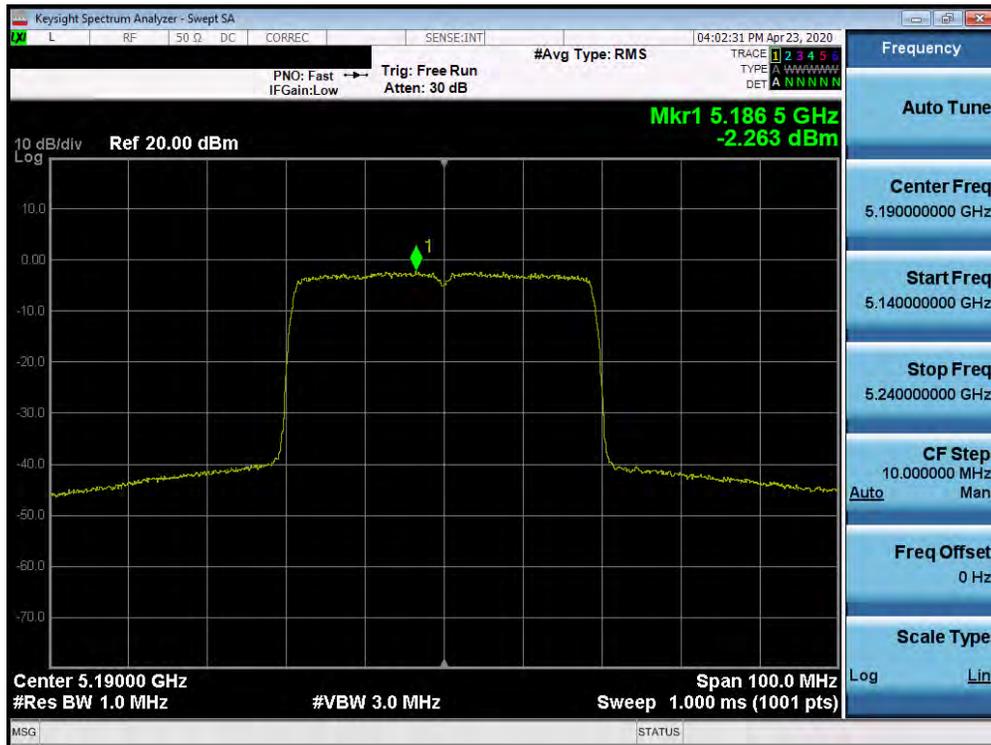


Plot 7-137. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)

| | | | | |
|---|---------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 117 of 299 |

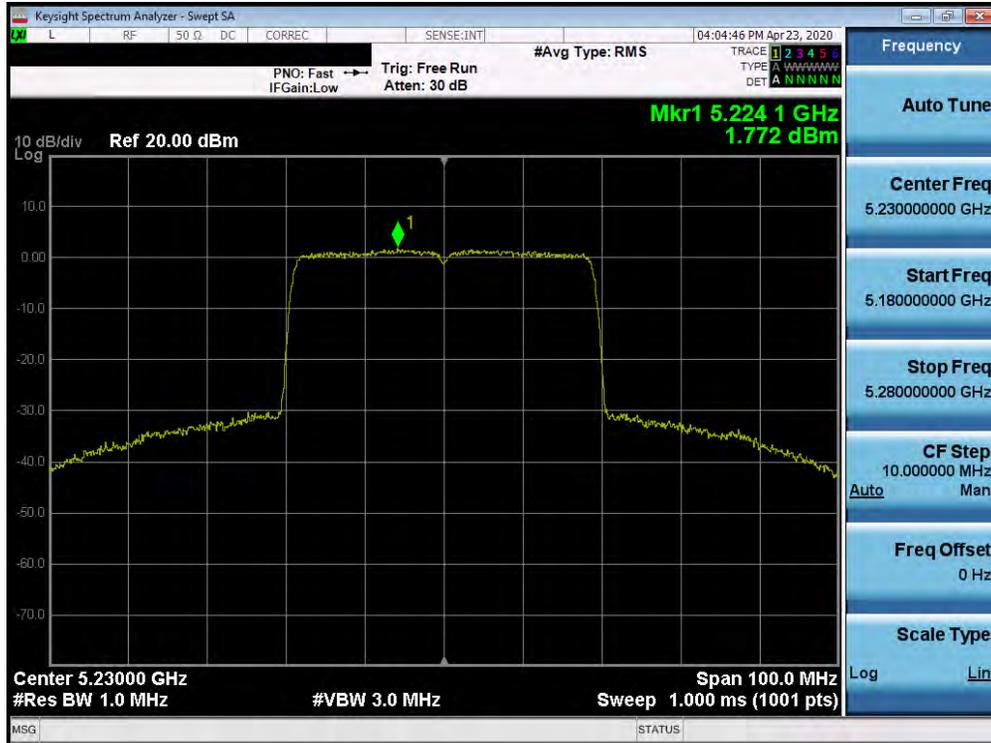


Plot 7-138. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)

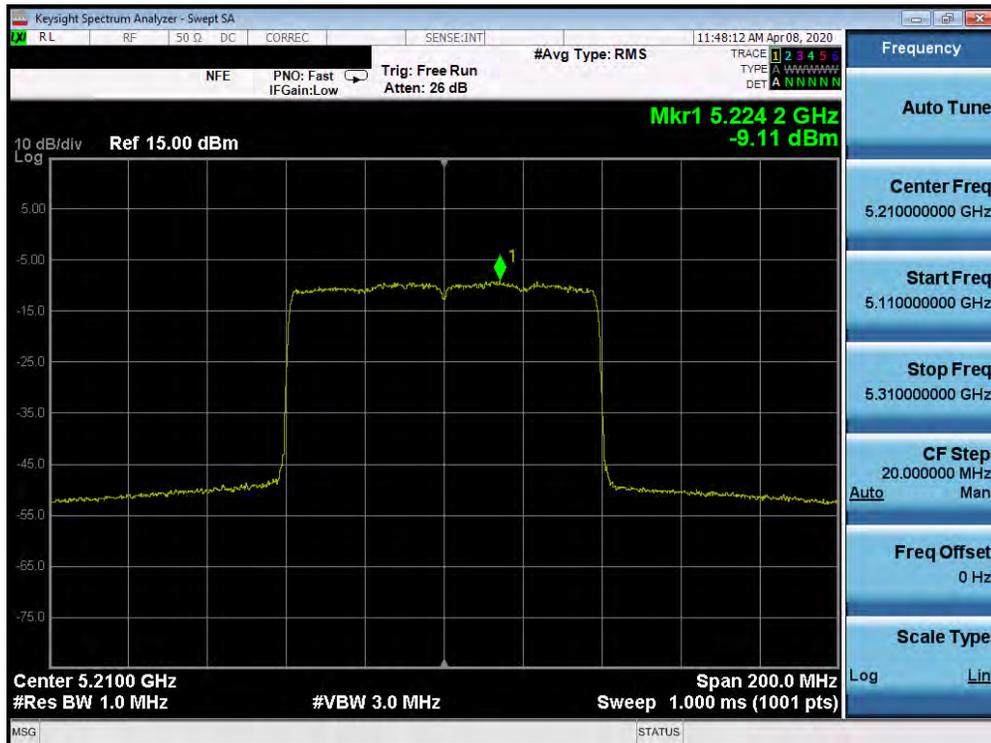


Plot 7-139. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)

| | | | | |
|---|---------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 118 of 299 |

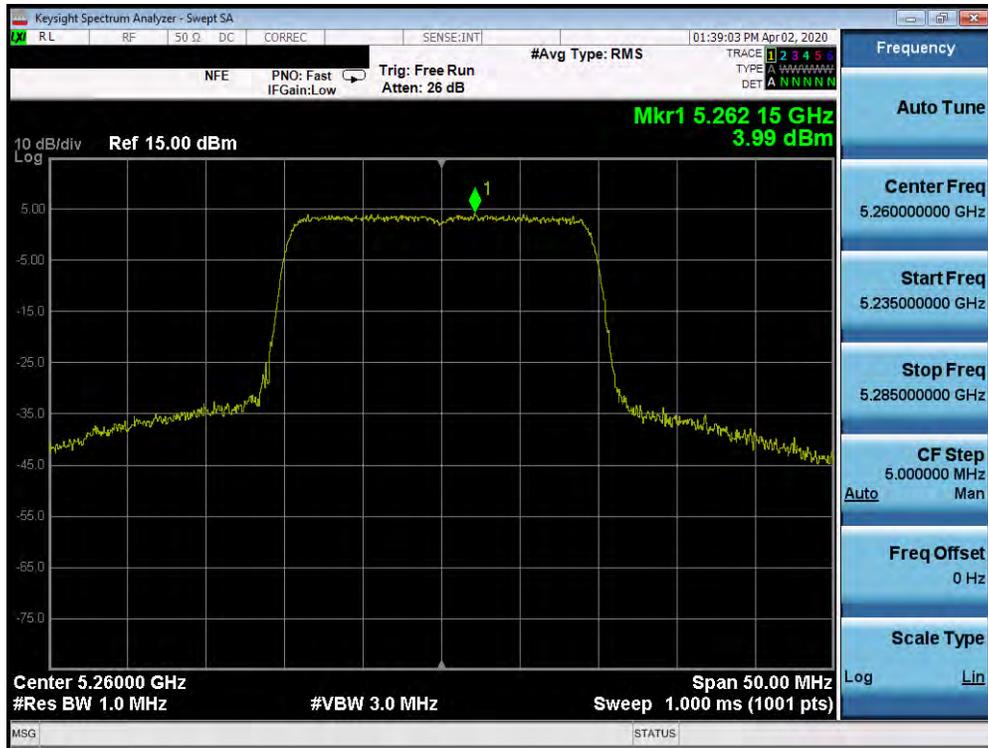


Plot 7-140. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)

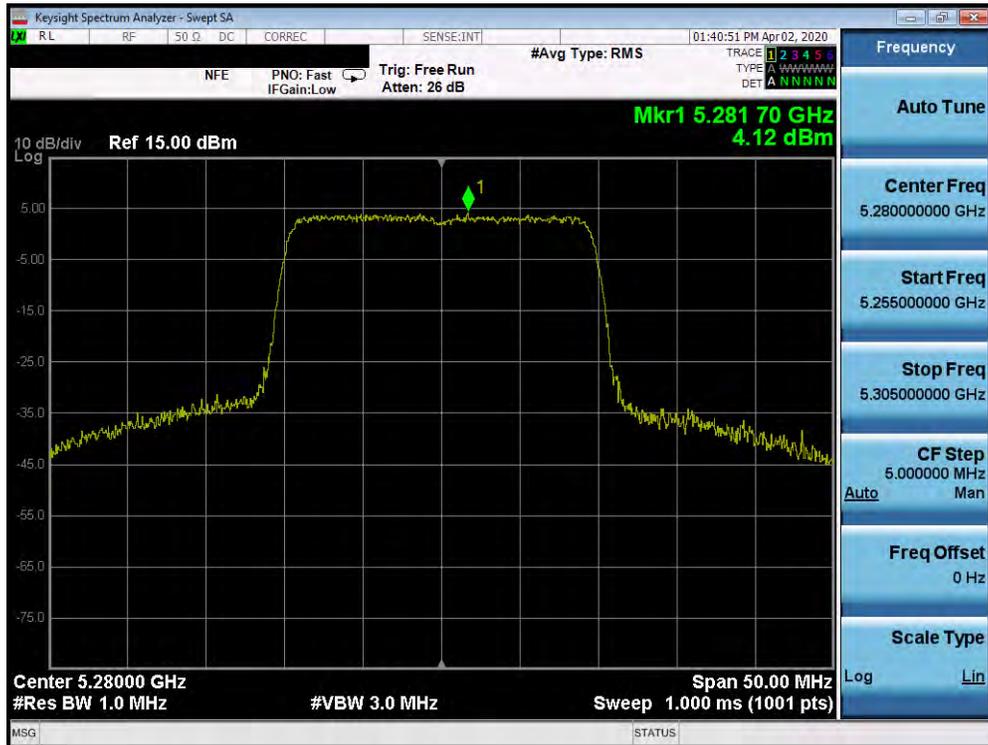


Plot 7-141. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

| | | | | |
|---|--|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 119 of 299 |

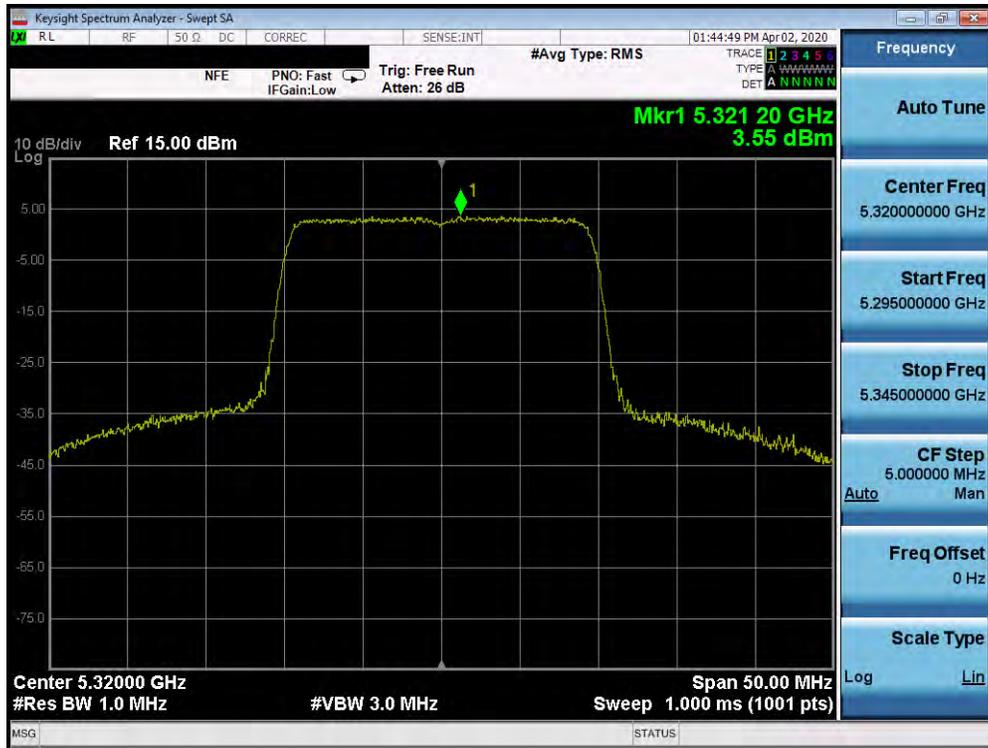


Plot 7-142. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)

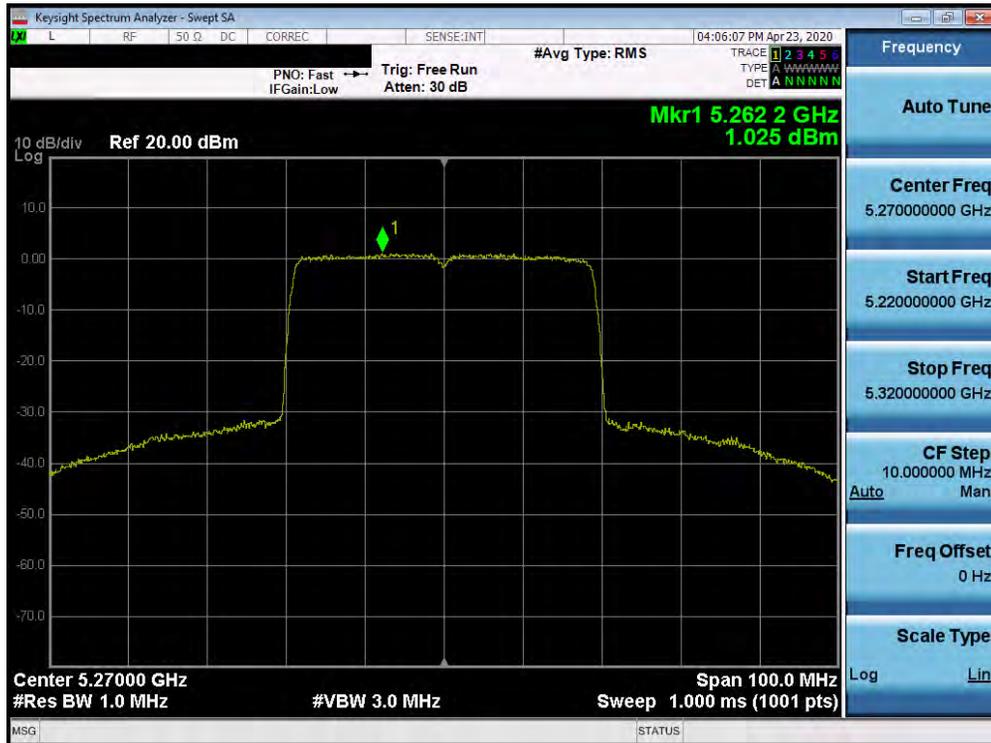


Plot 7-143. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 120 of 299 |

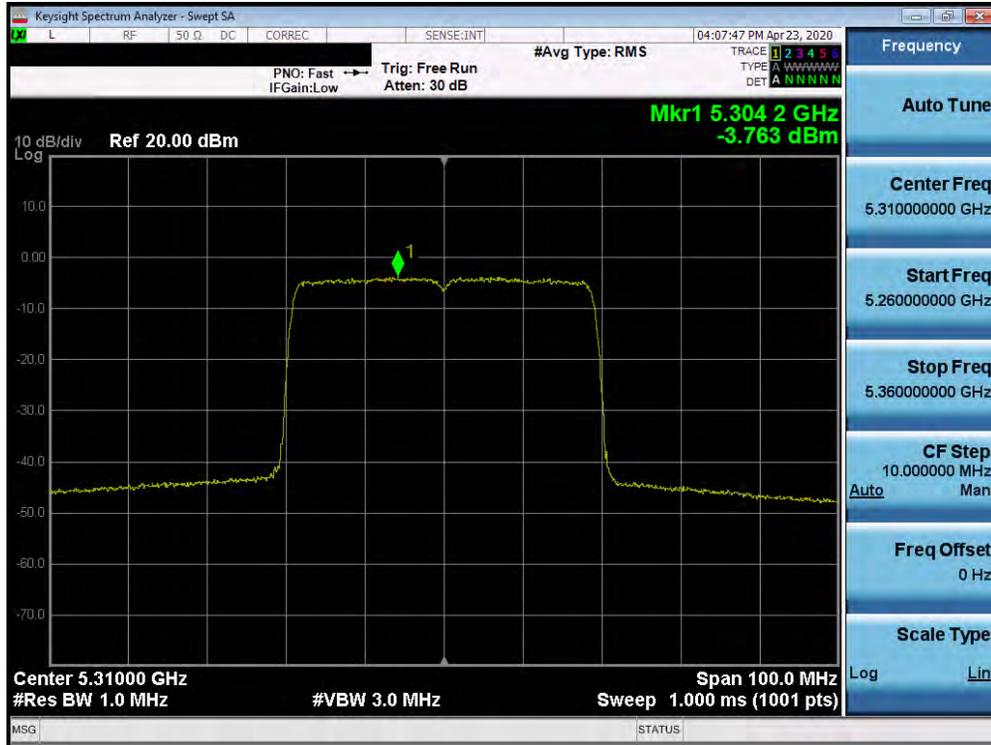


Plot 7-144. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)

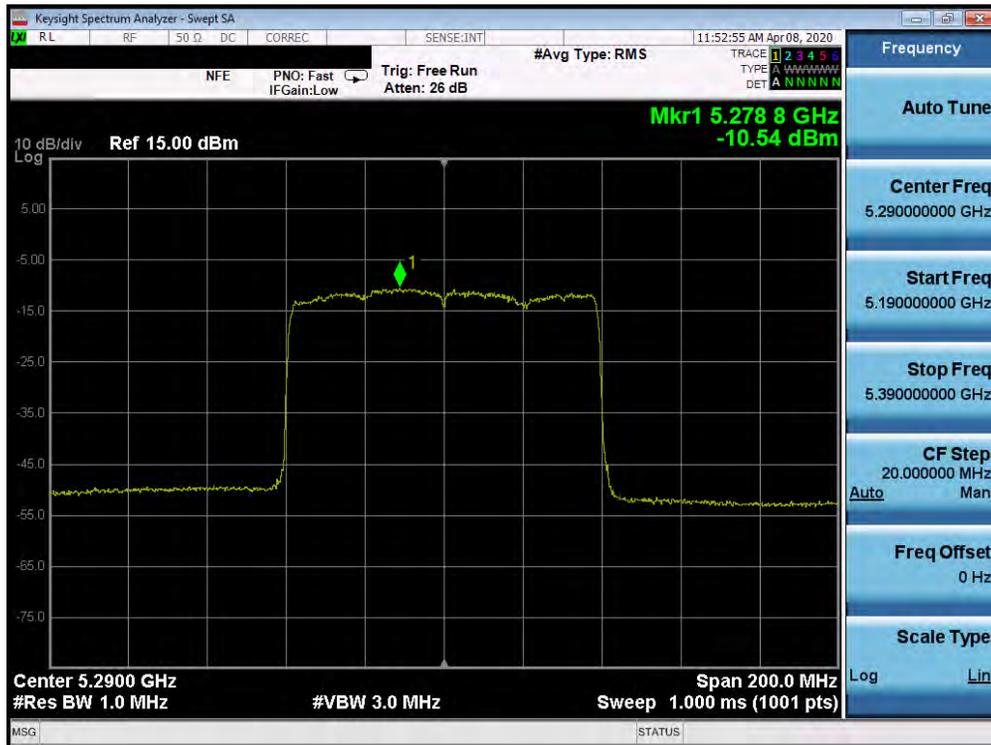


Plot 7-145. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 121 of 299 |

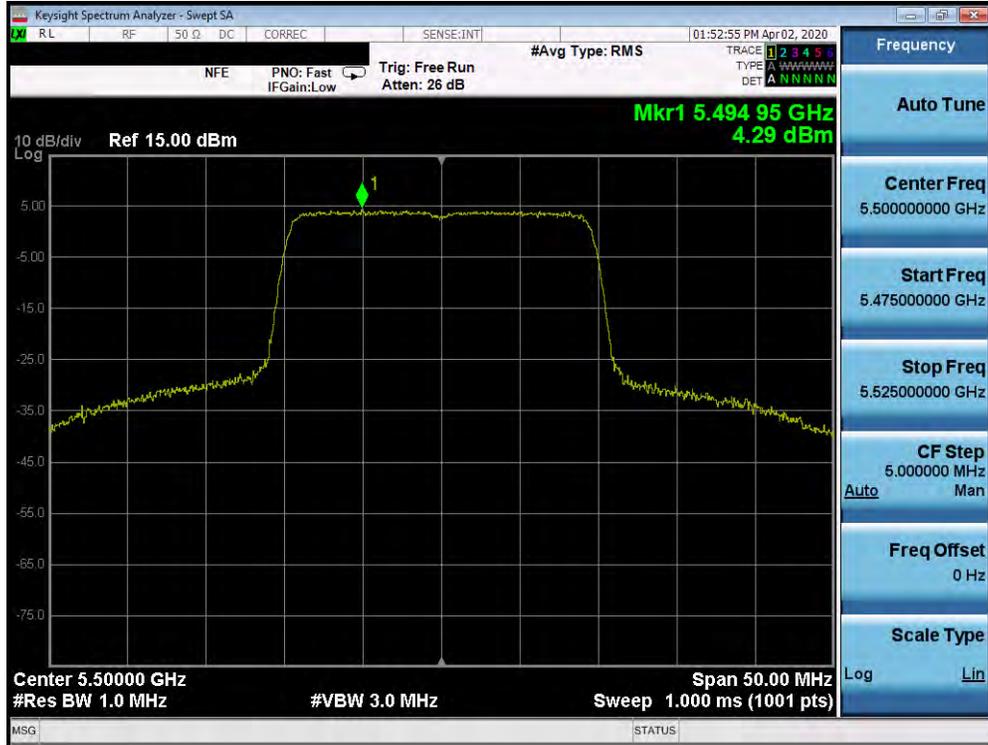


Plot 7-146. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)

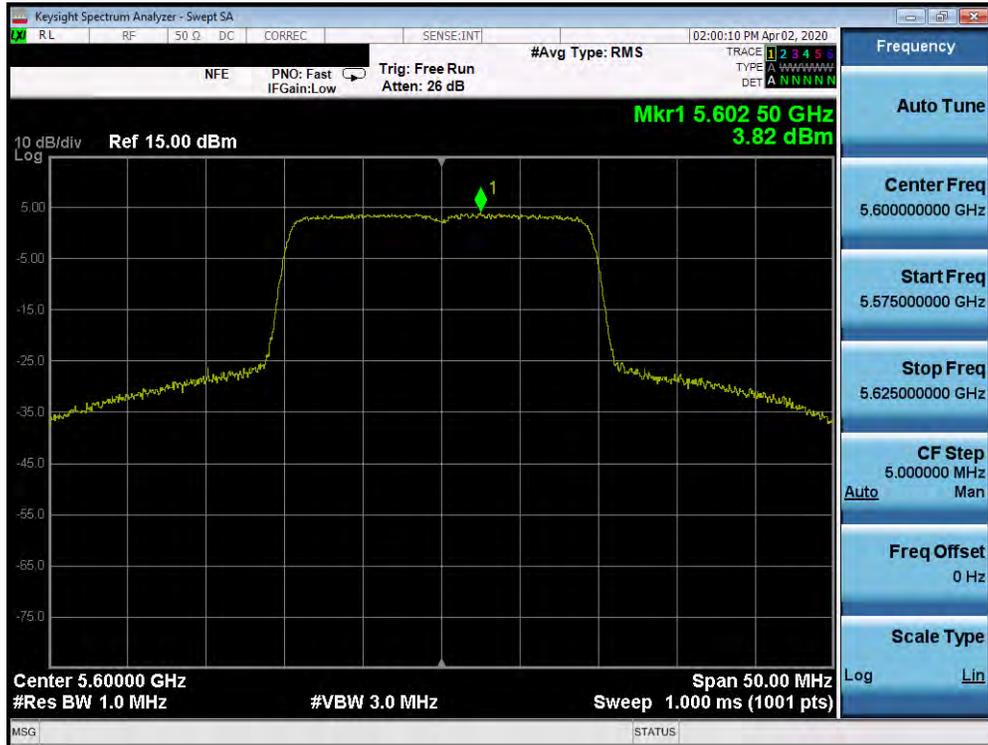


Plot 7-147. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

| | | | | |
|---|---------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 122 of 299 |

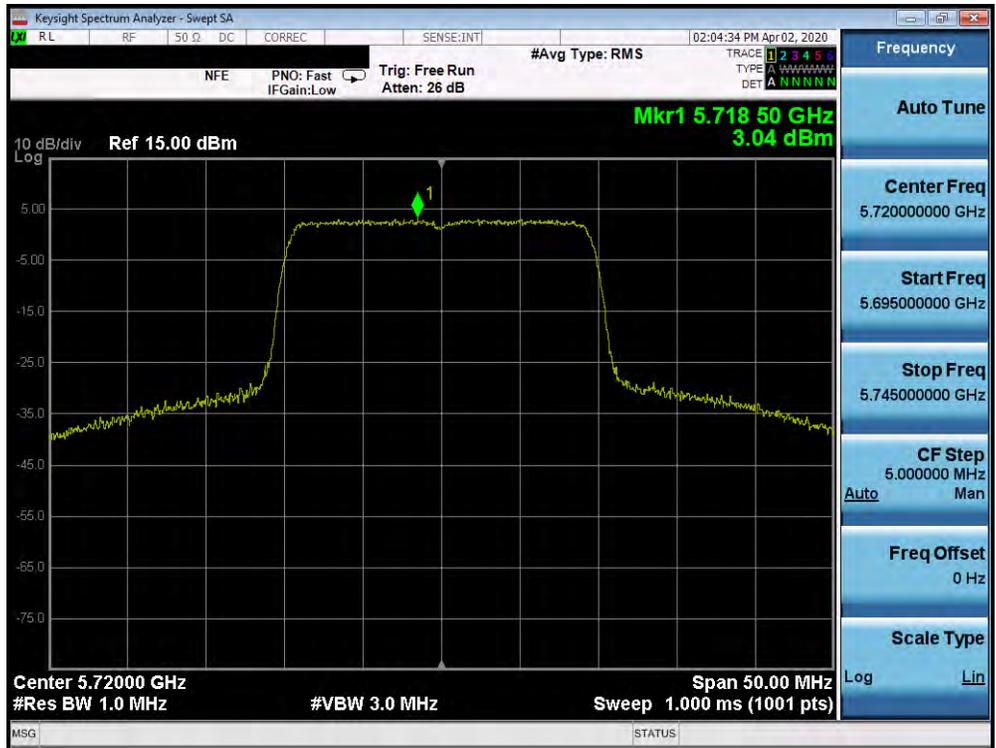


Plot 7-148. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)

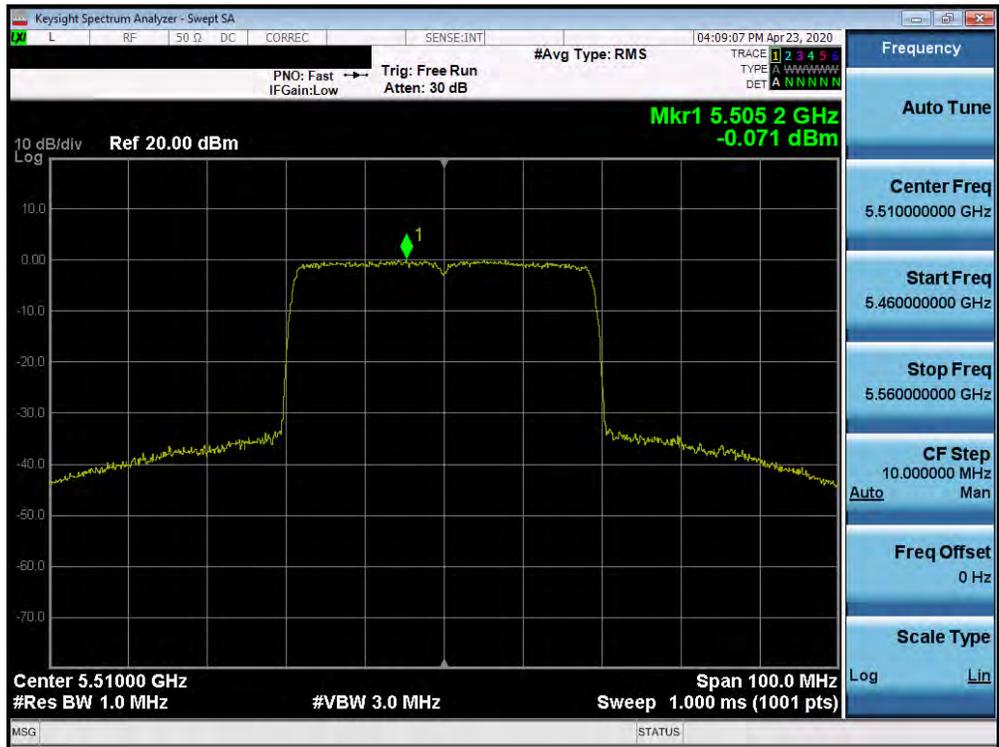


Plot 7-149. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 123 of 299 |

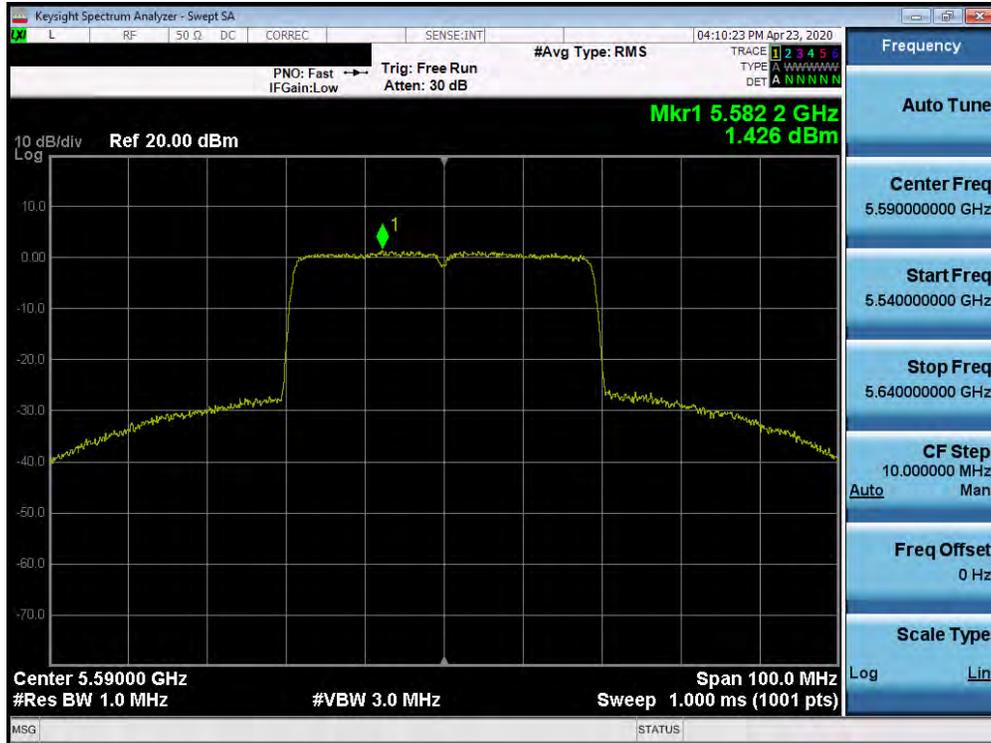


Plot 7-150. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)

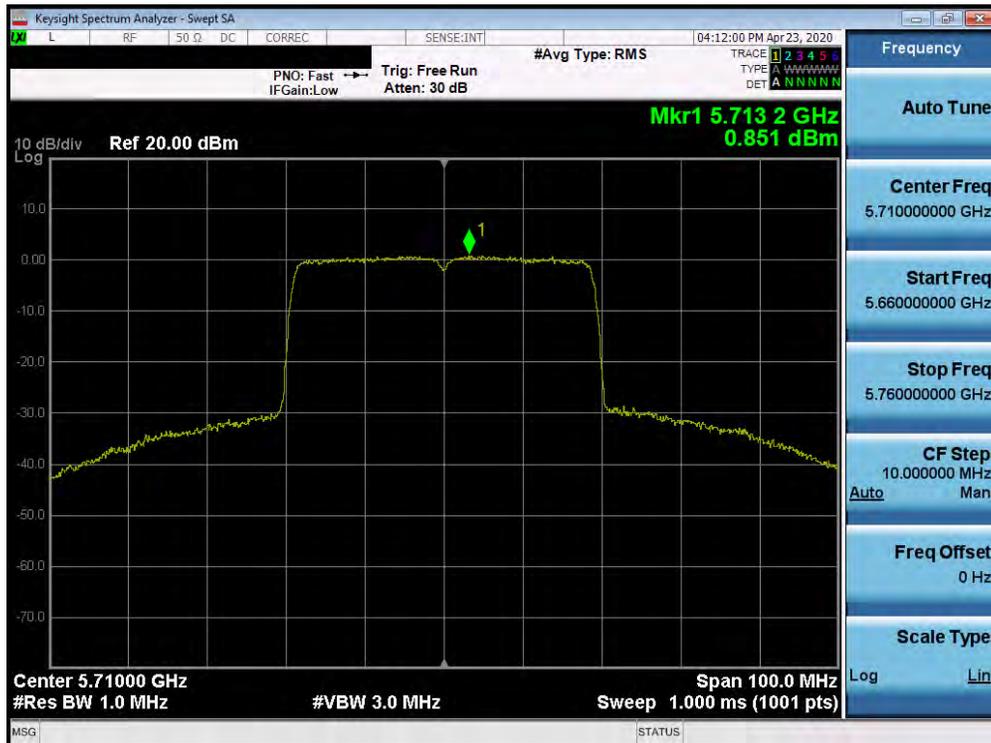


Plot 7-151. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 124 of 299 |

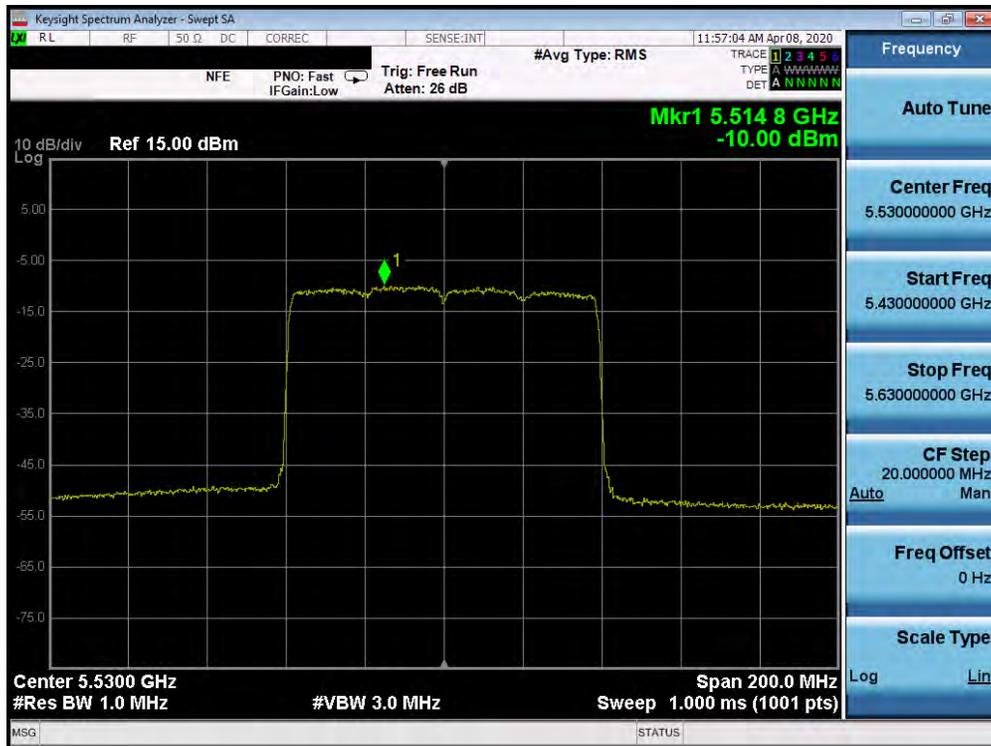


Plot 7-152. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)



Plot 7-153. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)

| | | | | |
|---|--------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 125 of 299 |

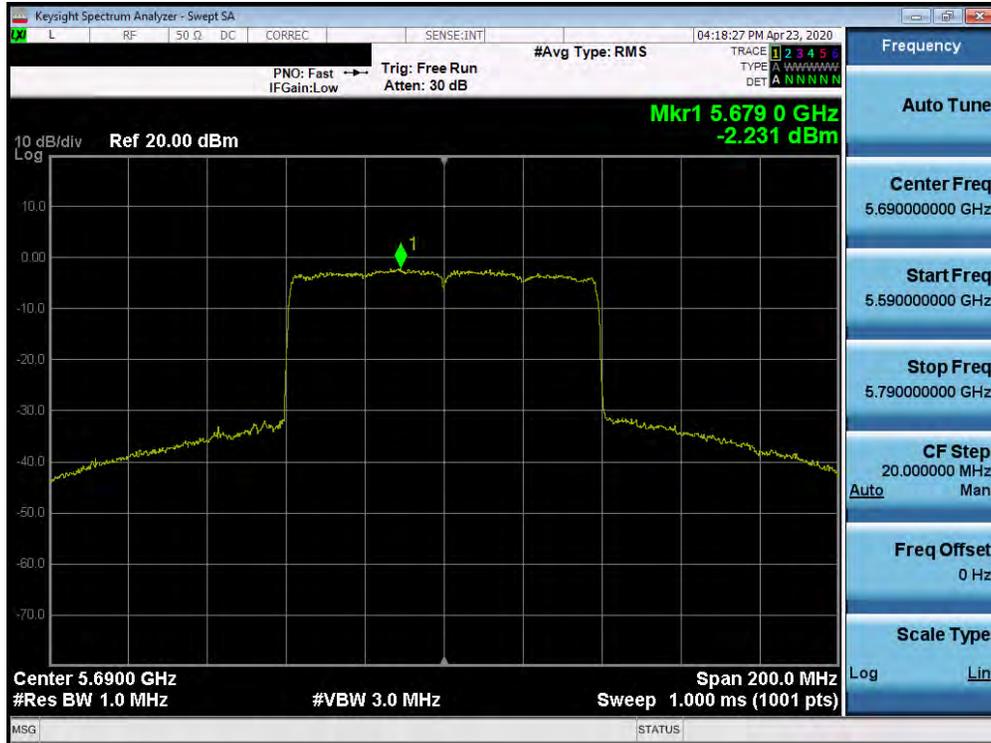


Plot 7-154. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)



Plot 7-155. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

| | | | | |
|---|---------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: A3LSMG981V | PCTEST Proud to be part of Samsung | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 126 of 299 |



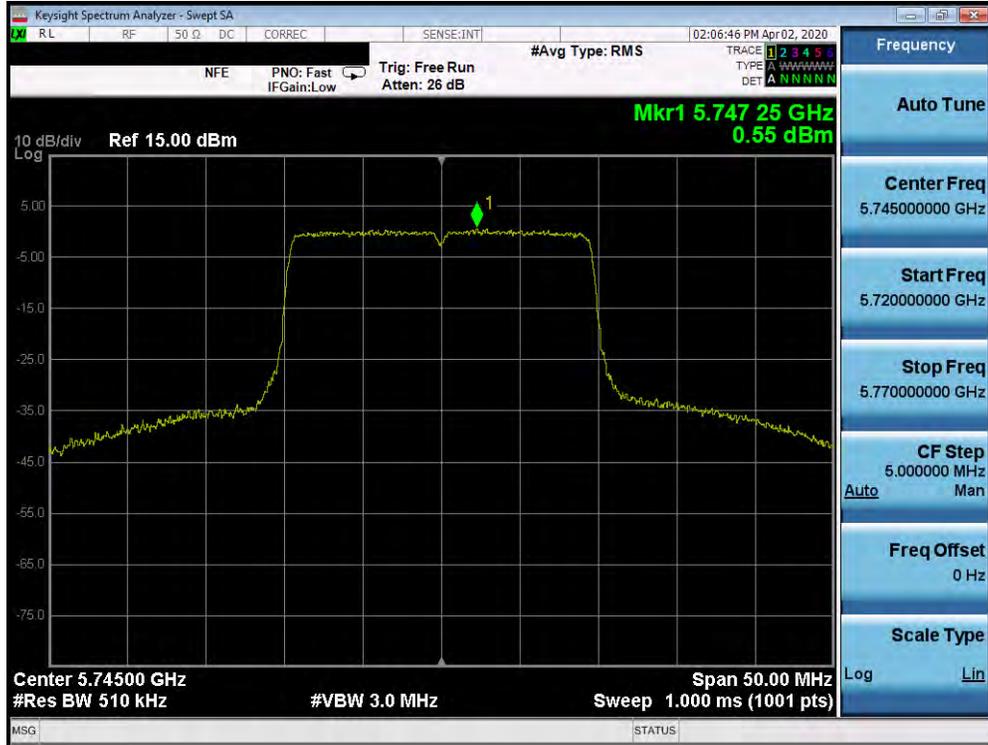
Plot 7-156. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 127 of 299 |

| | Frequency [MHz] | Channel No. | 802.11 Mode | Tones | Data Rate [Mbps] | Measured Power Density [dBm] | Max Permissible Power Density | Margin [dB] |
|---------------|-----------------|-------------|-------------|-------|------------------|------------------------------|-------------------------------|-------------|
| Band 3 | 5745 | 149 | ax (20MHz) | 242T | MCS0 | 0.55 | 30.00 | -29.46 |
| | 5785 | 157 | ax (20MHz) | 242T | MCS0 | 0.44 | 30.00 | -29.56 |
| | 5825 | 165 | ax (20MHz) | 242T | MCS0 | 0.81 | 30.00 | -29.19 |
| | 5755 | 151 | ax (40MHz) | 484T | MCS0 | 1.11 | 30.00 | -28.89 |
| | 5795 | 159 | ax (40MHz) | 484T | MCS0 | 0.78 | 30.00 | -29.22 |
| | 5775 | 155 | ax (80MHz) | 996T | MCS0 | -3.21 | 30.00 | -33.21 |

Table 7-57. Band 3 Conducted Power Spectral Density Measurements SISO ANT1 (Full Tones)

| | | | | |
|--|---|---|---|--|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 128 of 299 |



Plot 7-157. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

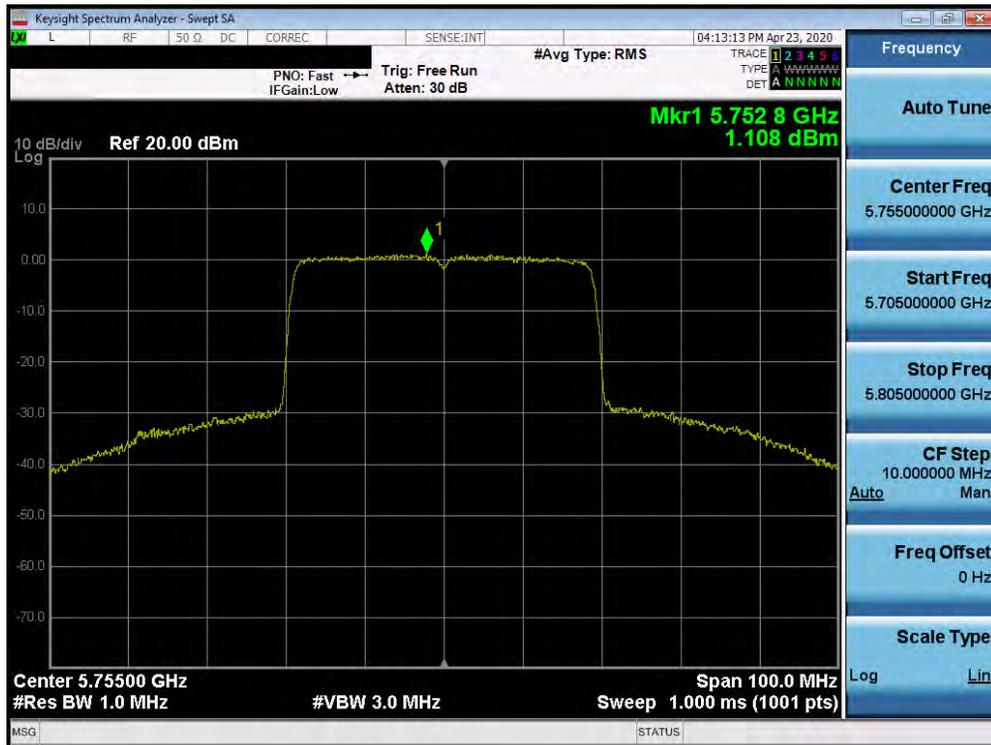


Plot 7-158. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 129 of 299 |



Plot 7-159. Power Spectral Density Plot SISO ANT1 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)



Plot 7-160. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG981V |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003090034-08.A3L | Test Dates: 3/17 – 5/8/2020 | EUT Type: Portable Handset | | Page 130 of 299 |